LOREX®
VIEW YOUR WORLD®

# WIRELESS NETWORK CAMERA

USER'S GUIDE
ENGLISH VERSION 1.0


LIVE

LNC200 Series

www.lorextechnology.com

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# NEED HELP?

## CONTACT US FIRST

**DO NOT RETURN THIS PRODUCT TO THE STORE**

**Please make sure to register your product at www.lorextechnology.com to receive product updates and technical support.**

# 2 Easy Ways to Contact Us

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Product Support is available 24/7 including product information, user manuals, quick start up guides and FAQ's at **www.lorextechnology.com/support**

For all other matters, visit **www.lorextechnology.com**

## By Phone:

North America:

Customer Service (for warranty matters): **1-888-425-6739** (1-888-42-LOREX)

Tech Support (for technical/installation issues): **1-877-755-6739** (1-877-75-LOREX)

Mexico: **001-800-681-9263, 001-800-514-6739**

International: **+800-425-6739-0** (Example: From the UK, dial 00 instead of +)

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### Hay 2 maneras fáciles de comunicarse con nosotros:

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Apoyo al cliente está disponible 24/7, incluyendo información del producto, manuales para el usuario, guías de inicio rápido y preguntas más frecuentes en:
**www.lorextechnology.com/support**

Para todo lo demás, visite
**www.lorextechnology.com**

## Por teléfono:

Norte América:
Atención al cliente (para asuntos de la garantía):
**1-888-425-6739** (1-888-42-LOREX)
Asistencia técnica (para asuntos técnicos o de instalación):
**1-877-755-6739** (1-877-75-LOREX)

Mexico: **001-800-681-9263, 001-800-514-6739**

Internacional: **+800-425-6739-0**
(Ejemplo: Desde el Reino Unido, marque el 00 en lugar del +)

# BESOIN D'ASSISTANCE?

## COMMUNIQUEZ D'ABORD AVEC NOUS

**NE RETOURNEZ PAS CE PRODUIT AU MAGASIN**

Veuillez enregistrer votre produit sur le site www.lorextechnology.com afin de recevoir des mises à jour et le soutien technique pour votre produit.

### 2 façons simples de communiquer avec nous :

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À votre disposition 24/7, le soutien pour les produits comprend les renseignements sur les produits, guides d'utilisation, guides de départ rapide et FAQ :
**www.lorextechnology.com/support**

Pour toutes les autres questions,
visitez **www.lorextechnology.com**

## Par téléphone :

En Amérique du Nord :
Service à la clientèle (pour tout ce qui concerne la garantie) :
**1-888-425-6739** (1-888-42-LOREX)
Soutien technique (pour les questions d'ordre technique ou relatives à l'installation) : **1-877-755-6739** (1-877-75-LOREX)

Mexique : **001-800-681-9263, 001-800-514-6739**

International : **+800-425-6739-0**
(par exemple : à partir du Royaume-Uni, composez le 00 au lieu de +)

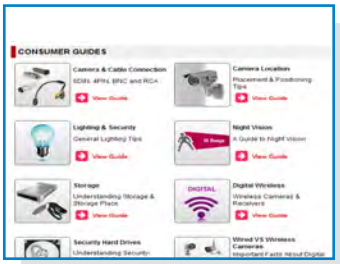
# BEFORE YOU START

**Please make sure to register your product at www.lorextechnology.com to receive product updates and technical support**

## THIS PRODUCT MAY REQUIRE PROFESSIONAL INSTALLATION

**LOREX IS COMMITTED TO FULFILLING YOUR SECURITY NEEDS**

- We have developed user friendly products and documentation. Please read the Quick Start Guide and User Manual before you install this product.




- Consumer Guides and Video Tutorials are available on our web site at **www.lorextechnology.com/support**

- If you require further installation assistance, please visit **www.lorextechnology.com/installation** or contact a professional installer.

- Please note that once the components of this product have been unsealed, you cannot return this product directly to the store without the original packaging.

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# AVANT DE COMMENCER

Veuillez enregistrer votre produit sur le site www.lorextechnology.com afin de recevoir des mises à jour et le soutien technique pour votre produit.

CE PRODUIT PEUT NÉCESSITER UNE INSTALLATION PROFESSIONNELLE

## LOREX S'ENGAGE À RÉPONDRE À VOS BESOINS EN MATIÈRE DE SÉCURITÉ

- Nous avons conçu et développé une documentation et des produits extrêmement conviviaux. Veuillez lire le Guide de départ rapide et le Guide d'utilisation avant d'installer ce produit.
- Des guides pour consommateurs et des tutoriels vidéo vous sont offerts sur notre site Web : www.lorextechnology.com/support
- Si vous avez besoin de plus d'assistance pour l'installation de ce produit, veuillez visiter le site www.lorextechnology/installation ou communiquez avec un installateur professionnel.
- Veuillez prendre note que lorsque vous avez déballé les pièces et composantes de ce produit, vous ne pouvez pas retourner celui-ci directement au magasin sans son emballage original.

# ANTES DE EMPEZAR

Cerciórese de por favor colocar su producto en www.lorextechnology.com para recibir actualizaciones y la información del producto y soporte técnico.

ESTE PRODUCTO PUEDE EXIGIR UNA INSTALACIÓN PROFESIONAL

## LOREX SE COMPROMETE A SATISFACER SUS NECESIDADES EN SEGURIDAD

- Favor de leer la guía de instalación rápida y la guía del usuario antes de instalar este product.
- Puede conseguir las guías del consumidor y los cursos en enseñanza video sobre el Internet visitando www.lorextechnology.com/support
- Si necesita ayuda para la instalación, visite www.lorextechnology.com/installation o contacte un especialista en instalaciones.
- Favor de notar que una vez que los componentes de este producto han sido removidos del embalaje, no podrá devolver este producto directamente a la tienda.


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SEP 6 2012 - R8

# Welcome!

Thank you for purchasing this Lorex wireless network camera. This user's guide refers to the following models:

- LNC201
- LNC204

# Contents

Before you start, make sure you have the contents listed below.

- 1 x Camera
- 1 x Camera power adapter and USB power cable
- 1 x Ethernet cable
- 1 x Mounting kit
- 1 x Quick Start Guide
- 1 x Software/documentation CD

# Safety Instructions

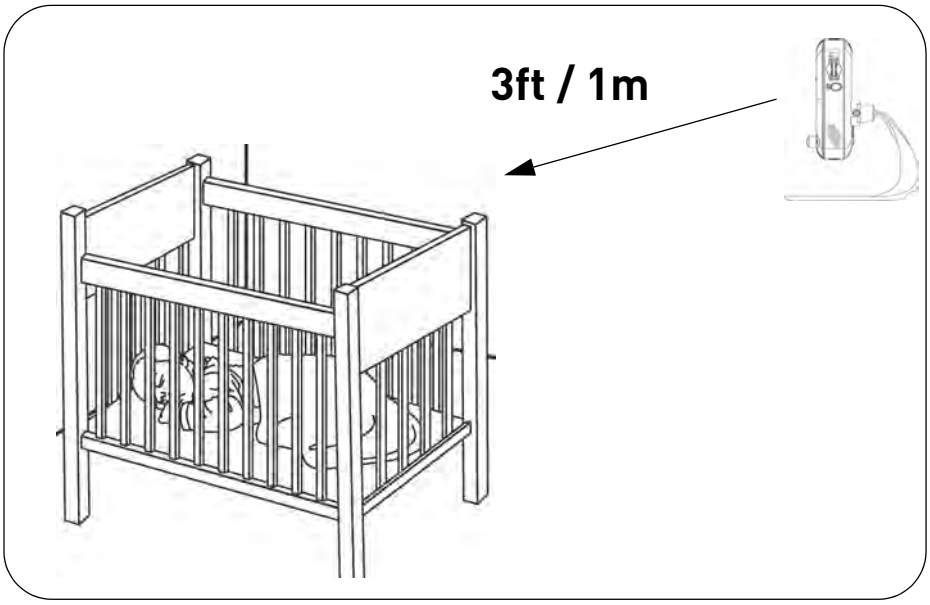
- Read this guide carefully and keep it for future reference.
- **Camera is rated for indoor use only.**
- Do not use in wet or humid areas.
- Use the camera within given temperature, humidity, and voltage levels noted in the Technical Specifications.
- Do not use the camera near a heat source, such as a radiator.
- Do not point the camera directly towards the sun or a source of intense light.
- Do not disassemble the camera.
- Periodic cleaning may be required. Use a damp cloth only. Do not use harsh cleaners or aerosol cleaners.
- Do not cover the camera with a towel or blanket.
- Keep all power and network cables out of reach of children.
- Use only the included power adapter or USB power adapters rated for 1A or higher.

# If using this product as a baby monitor:

We advise you to take the following precautions to avoid possible injury to infants:

- **DO NOT** place the camera too close to cribs, bassinets, play yards, and other safe sleep environments for infants.
- MAKE SURE to run all power adapter cords and network cables where they are unlikely to be tripped over and are out of arms reach of your infant. Keep them at least **3ft / 1m** away.
- MAKE SURE the camera is on a stable footing so it cannot be easily knocked over.

**NOTE:** These precautions are important even if your infant is not yet standing or mobile



# Features

- iOS, Android™, PC and Mac compatible
- Mega-pixel for up to 1280x800 resolution at 30fps
- Wi-Fi & wired internet connectivity
- Easy connection to Wi-Fi networks with WPS[1]
- Night vision up to 30ft with single high-power IR LED[2]
- microSD recording & playback supported[3]
- 5 second pre-recording on SD card
- Dual motion detection: PIR & video
- Sound activated alerts
- Infrared thermometer and temperature alarm control
- Push notification of events & email alerts with snap shot attachment
- Built-in speaker and microphone for 2-way audio
- H.264 video compression
- Supports up to 20 simultaneous users[4]
- Triple streaming for simultaneous SD card, PC and Mobile Recording
- Flexible indoor mounting (counter, wall, ceiling)
- Expandable up to 4 cameras
- Watchdog function to prevent system failure

As our product is subject to continuous improvement, Lorex Technology & subsidiaries reserve the right to modify product design, specifications & prices without notice and without incurring any obligation.

1. Compatible with WPS enabled routers (not included).
2. Infrared illumination range under ideal conditions. Actual range and clarity may vary depending on scene/object reflection and camera application.
3. microSD Card not included (supports up to 32GB).
4. Connection speed may vary depending Internet bandwidth.

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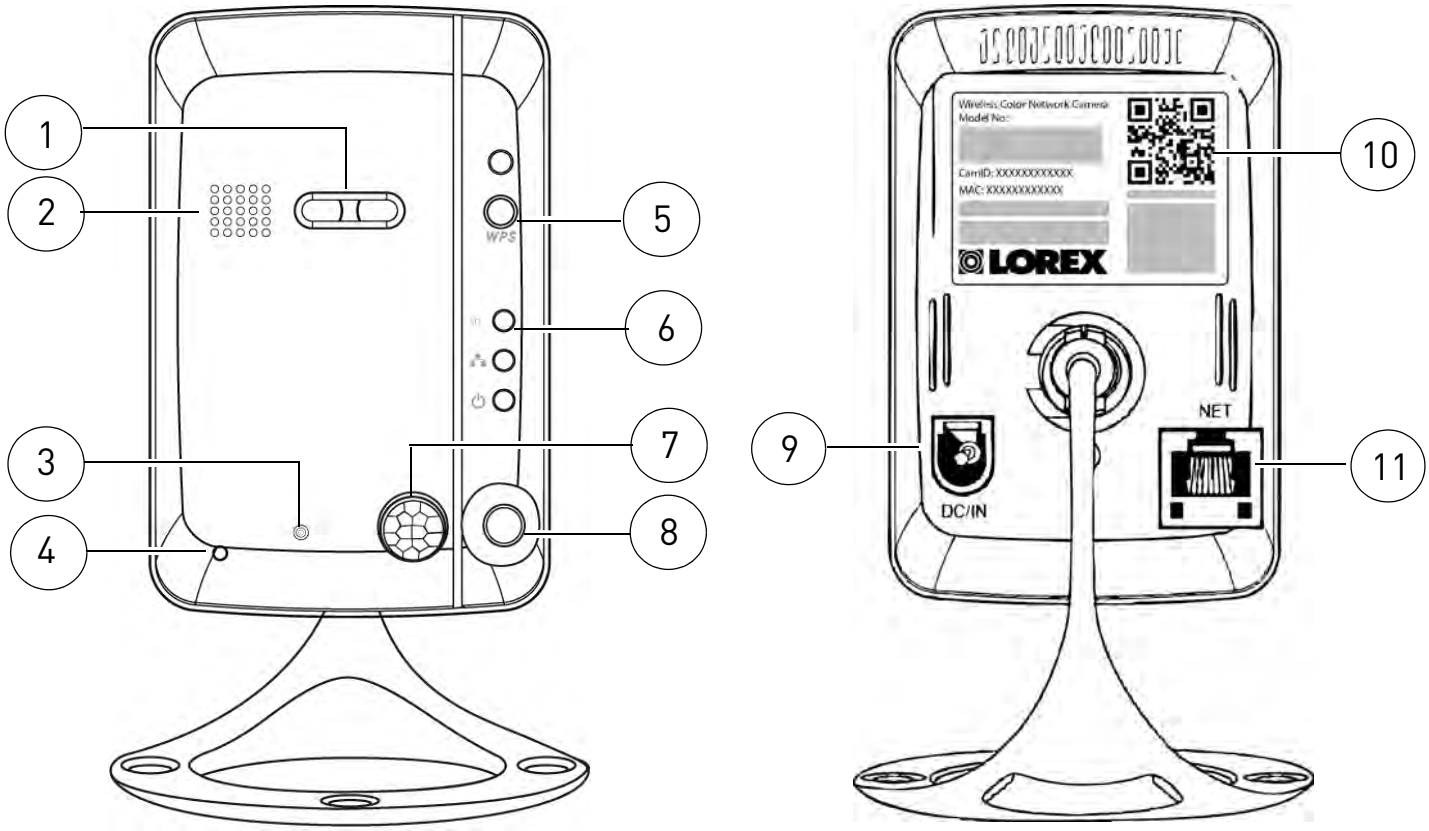
English

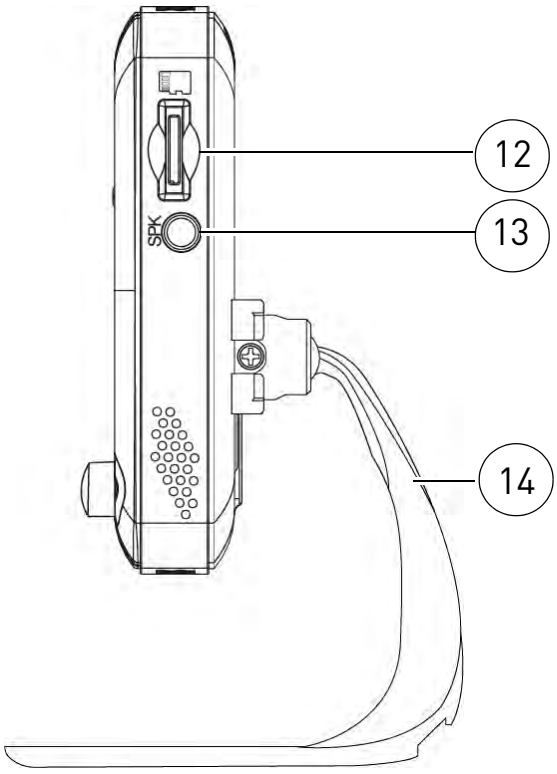
# 1. CAMERA OVERVIEW

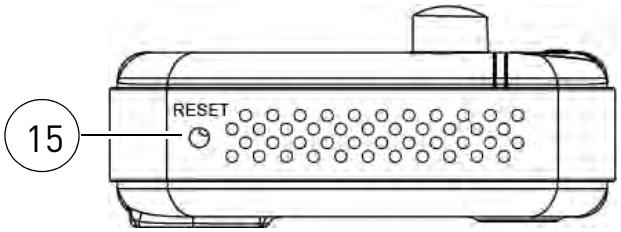



1. **Camera Lens:** The camera has separate lenses for day/night use.
2. **Speaker:** Enables 2-way audio and alarms.
3. **Temperature Sensor:** Detects the room's ambient temperature. The temperature is displayed on the camera's video display. You may enable temperature alerts using the Lorex Ping app.
4. **Microphone**
5. **WPS Button:** Used during Quick Scan WiFi setup or to connect the camera to a wireless router (not included) with a WPS button.
6. **Indicator Lights:**
   - **SD:** Glows when a microSD card (not included) is inserted. Flashes during recording.
   - **/ Network:** Glows when connected to an Ethernet or WiFi network. Flashes when sending or receiving data.

- **/ Status:** Glows when camera is connected to the Internet. Flashes when there is a connection problem.

7. **PIR Motion Sensor:** Allows the camera to detect motion by tracking body heat.
8. **Infrared LED:** Allows the camera to see in the dark.
9. **DC/IN:** Connect the included power adapter.
10. **CamID Label:** Shows the camera's CamID number and a QR code for easy setup using mobile devices.
11. **NET:** Connect an Ethernet cable and connect the other end to your router (not included).




Bottom of camera

12. **MicroSD Card Slot:** Insert a microSD card (not included) to enable recording on the camera. Camera supports microSD or microSDHC cards up to a maximum size of 32GB.
13. **Audio Out:** Connect to an external speaker (not included) using a 3.5mm headphone jack.
14. **Mounting Stand:** For mounting instructions, see "Wall or Ceiling Mounting" on page 176.
15. **Reset Button:** While the camera is powered on, press with a pin or small object for at least 4 seconds to reset the camera to factory defaults. This is useful if you have forgotten the password for the camera.

# 2. GETTING STARTED

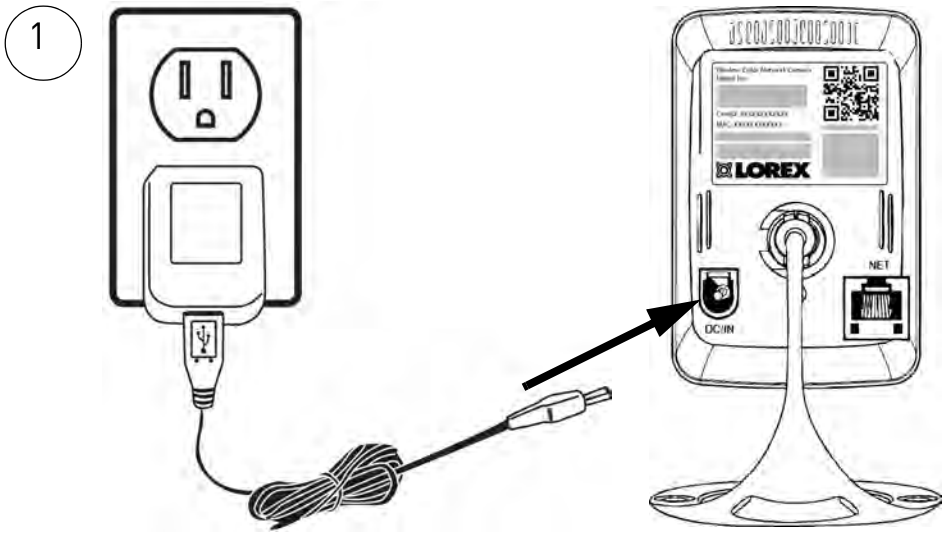


## 2.1 CONNECTING TO YOUR CAMERA ON IPHONE®

Follow the steps below to get up and running on an iPhone®, using WiFi or Ethernet.

### *2.1.1 WIFI SETUP*

1. Connect the power adapter to the camera and connect the other end to a power outlet. Do not connect the Ethernet cable.

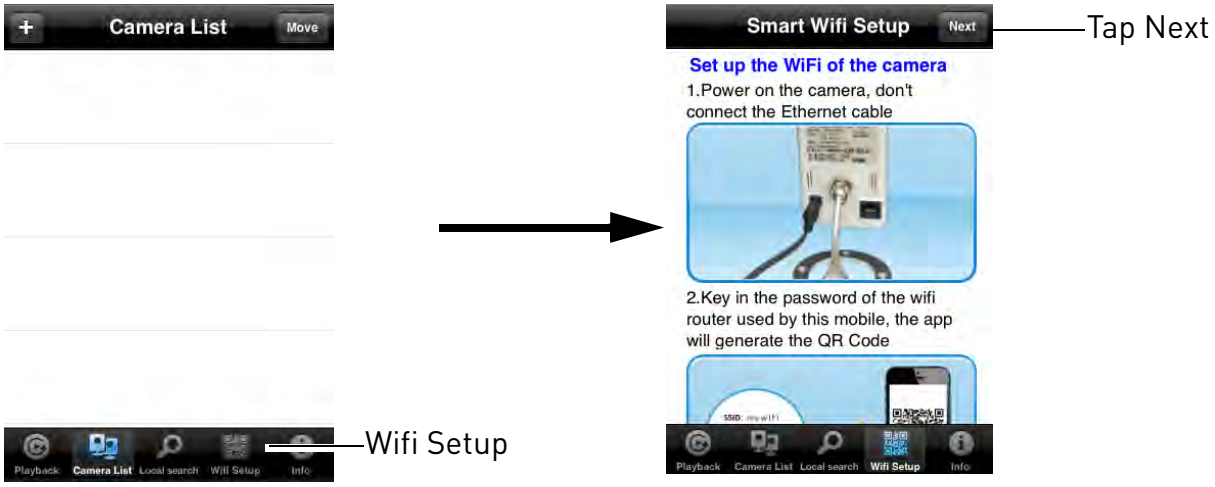



2. Connect your iPhone® to your WiFi network. See your iPhone's user guide for details on connecting to WiFi networks.
3. Download the free **Lorex Ping** app from the App Store.

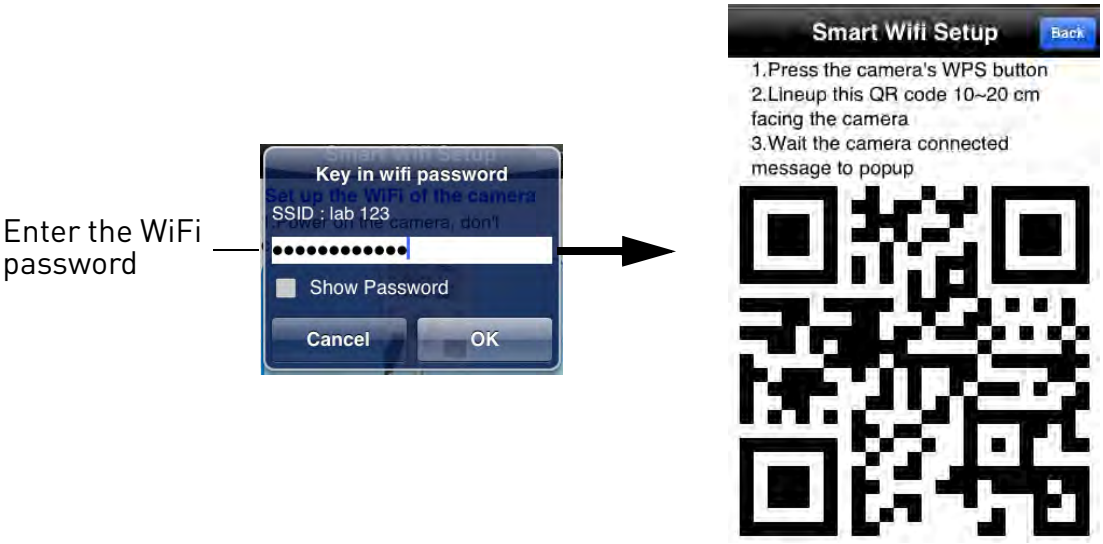
**NOTE:** Lorex Ping is a free application, but it requires a valid iTunes account to download. Lorex Ping requires iOS v4.0 and higher.

4. Tap the Lorex Ping icon ( ) from the home screen to open Lorex Ping.

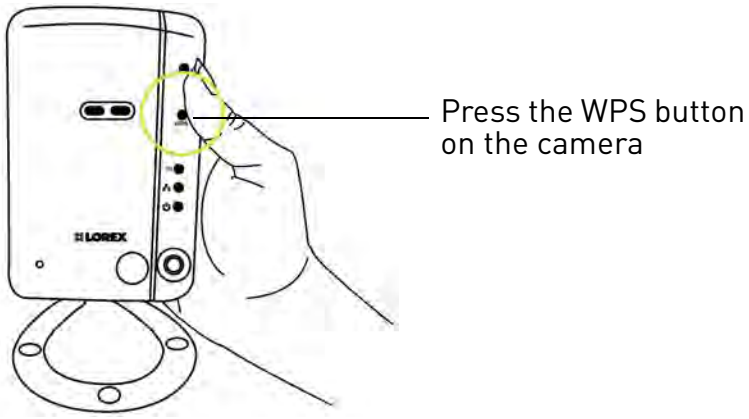
5. Press **Wifi Setup** then tap **Next**.



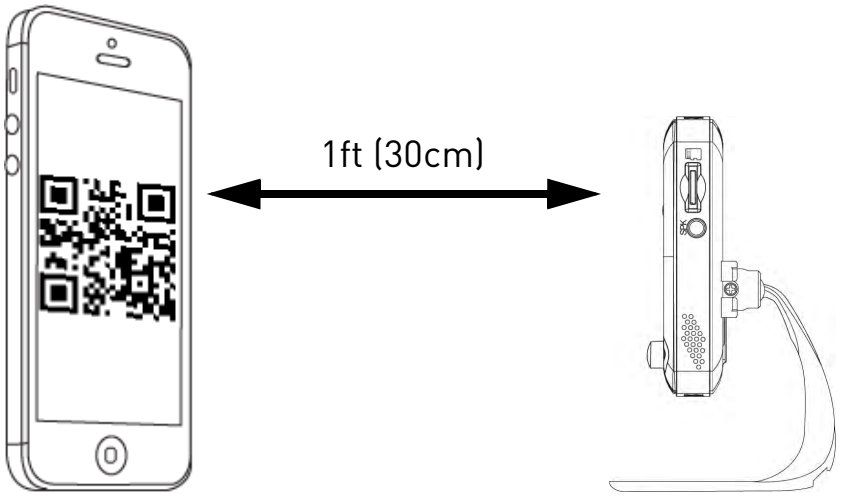

6. Enter the password for your WiFi network and press **OK**. A QR code appears on the screen with your WiFi network details.




7. Press the **WPS** button on the camera. The LEDs will start flashing.



8. Place your device about 1ft (30cm) away from the camera.




The camera scans the QR code on your iPhone® to connect to the WiFi network. The camera scans the QR code on your iPhone to connect to the WiFi network. When the connection is successful, the camera beeps, and the message below appears on your device after a few seconds.

9. Enter a name for your camera and press **OK**.


10. Tap the camera to connect.

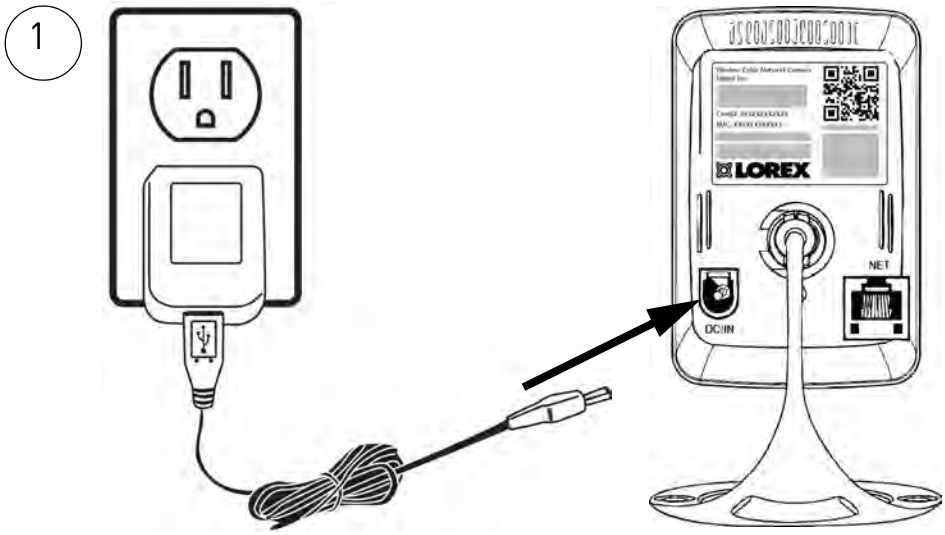
11. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.


12. Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **OK**.

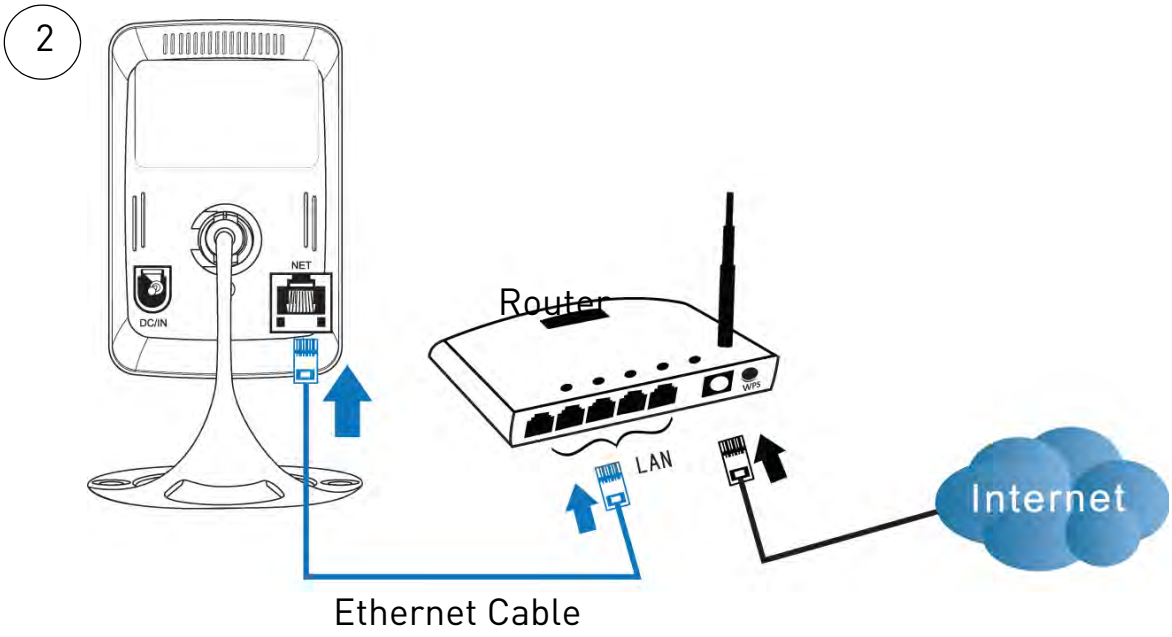

Tap the camera again to connect to the camera. Lorex Ping streams live video from your camera.

## *2.1.2 ETHERNET SETUP*

1. Connect the power adapter to the camera and connect the other end to a power outlet.



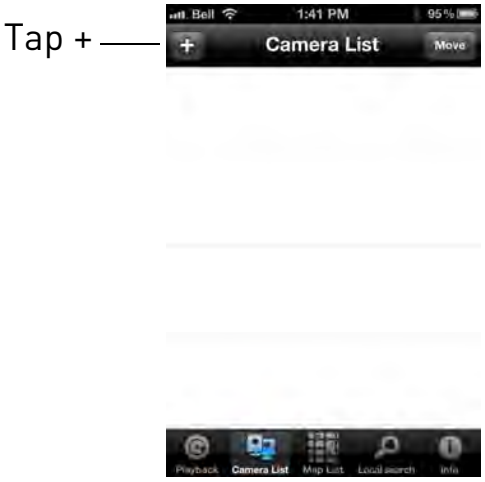
2. Connect an Ethernet cable (included) to the **NET** port on the camera and connect the other end to your router (not included).




3. Download **Lorex Ping** from the App Store.

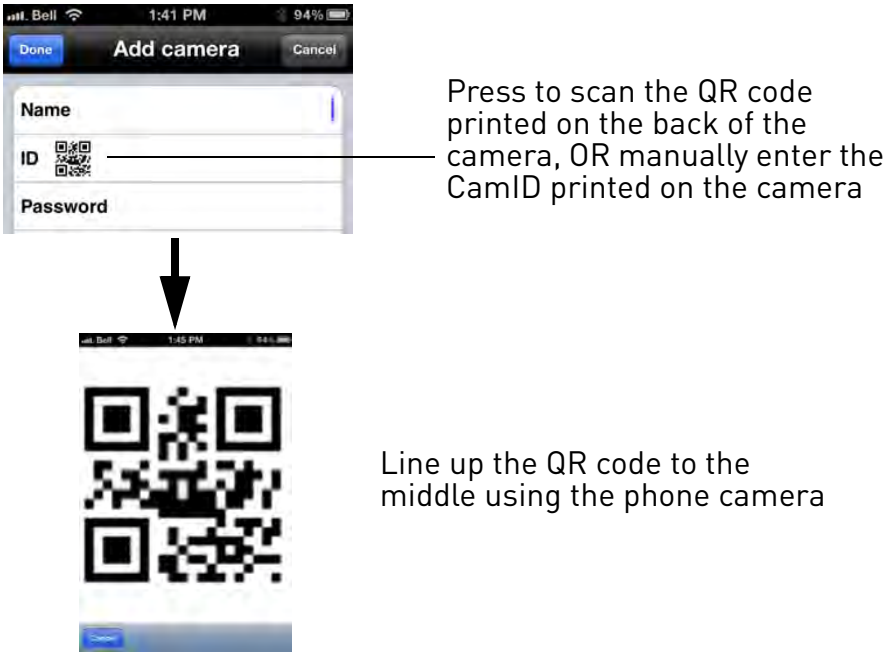
**NOTE:** Lorex Ping is a free application, but it requires a valid iTunes account to download. Lorex Ping requires iOS v4.0 and higher.

4. Tap the Lorex Ping icon ( ) from the home screen to open Lorex Ping. Lorex Ping opens to the Camera List.
5. Tap **+** to add a camera.



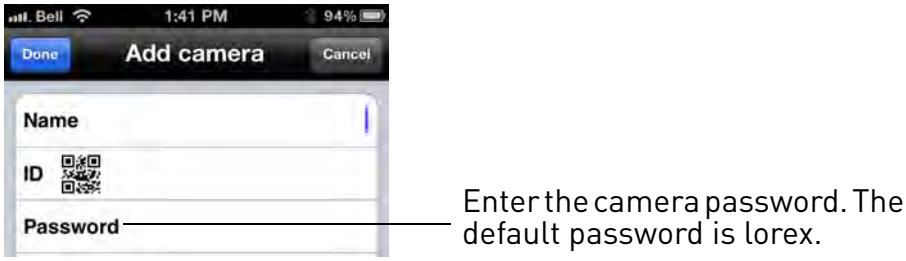
6. Under **Name**, enter a name for your camera. This can be anything of your choice.


7. Under **ID**, press the QR code button ( ) and line up the QR code printed on the back of the camera using the camera on the phone. The CamID will automatically be entered.




   • **OR:** Manually enter the **CamID** printed on the camera.

8. Under **Password**, enter the camera password. If this is the first time connecting to the camera, enter **lorex**. Press **Done**.



9. Tap the name of the camera in the Camera List to connect to the camera. Lorex Ping connects to the camera.


Tap the name of the camera to connect

10. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.


Tap OK

11. Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **OK**.


Enter a new password, confirm your password, and then tap OK

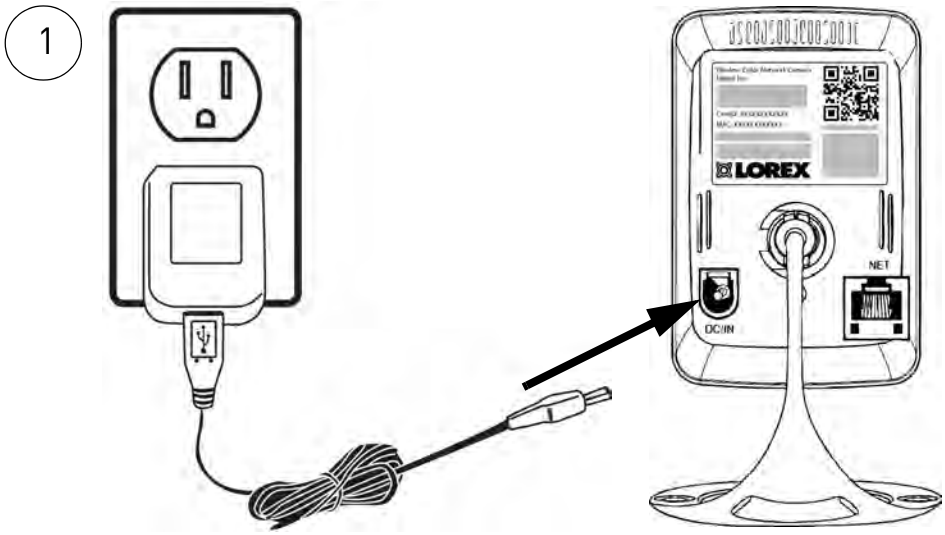
Tap the camera again to connect to the camera. Lorex Ping streams live video from your camera.

# 2.2 CONNECTING TO YOUR CAMERA ON IPAD®

Follow the steps below to connect to your camera on an iPad® using WiFi or Ethernet.

## *2.2.1 WIFI SETUP*

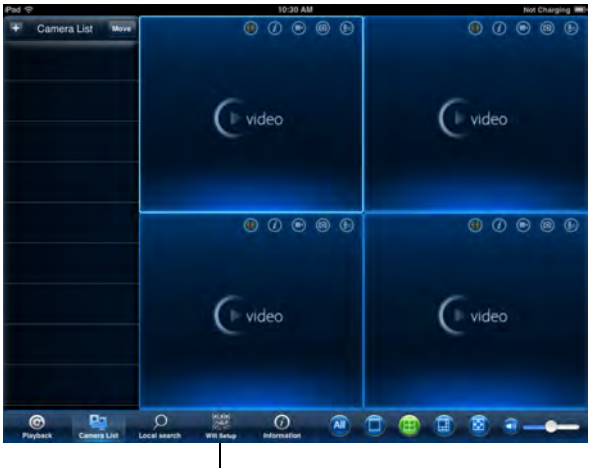
1. Connect the power adapter to the camera and connect the other end to a power outlet. Do not connect the Ethernet cable.




2. Connect your iPad® to your WiFi network. See your iPad's user guide for details on connecting to WiFi networks.
3. Download the free **Lorex Ping HD** app from the App Store.

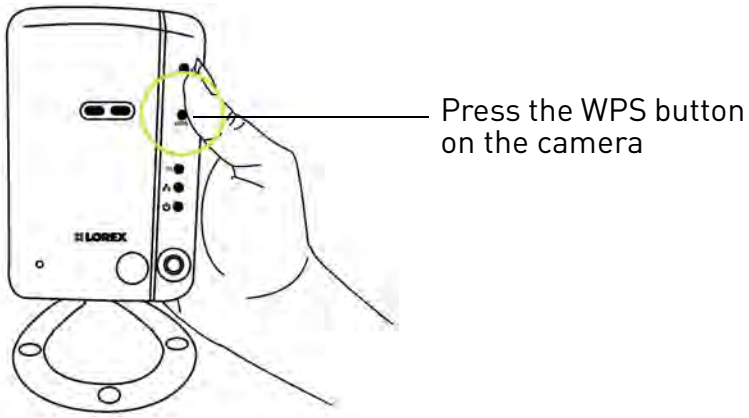
**NOTE:** Lorex Ping HD is a free application, but it requires a valid iTunes account to download. Lorex Ping requires iOS v4.0 and higher.

4. Tap the Lorex Ping HD icon ( ) from the home screen to open Lorex Ping.
5. Press **Wifi Setup** then tap **Next**.



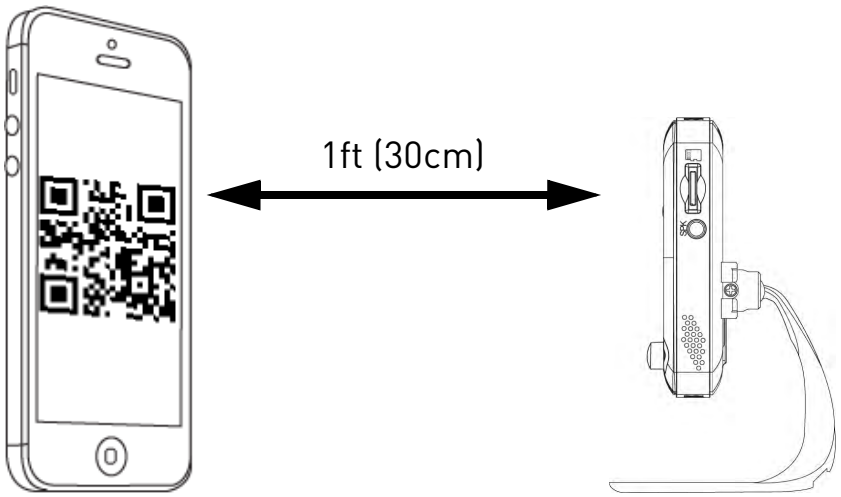

6. Enter the password for your WiFi network and press **OK**. A QR code appears on the screen with your WiFi network details.


7. Press the **WPS** button on the camera. The LEDs will start flashing.




English

8. Place your device about 1ft (30cm) away from the camera.



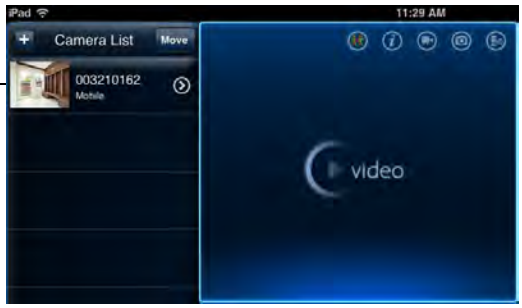

The camera scans the QR code on your device to connect to the WiFi network. When the connection is successful, the camera beeps, and the message below appears on your device after a few seconds.

9. Enter a name for your camera and press **OK**.


Enter a name for your camera

10. Tap the camera to connect.

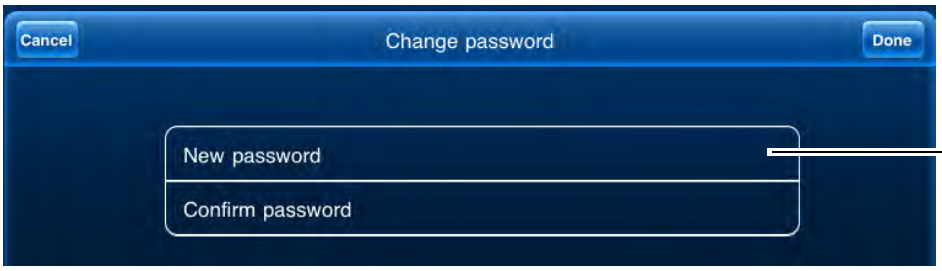
Tap the camera



11. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.


Tap OK

12. Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **Done**.

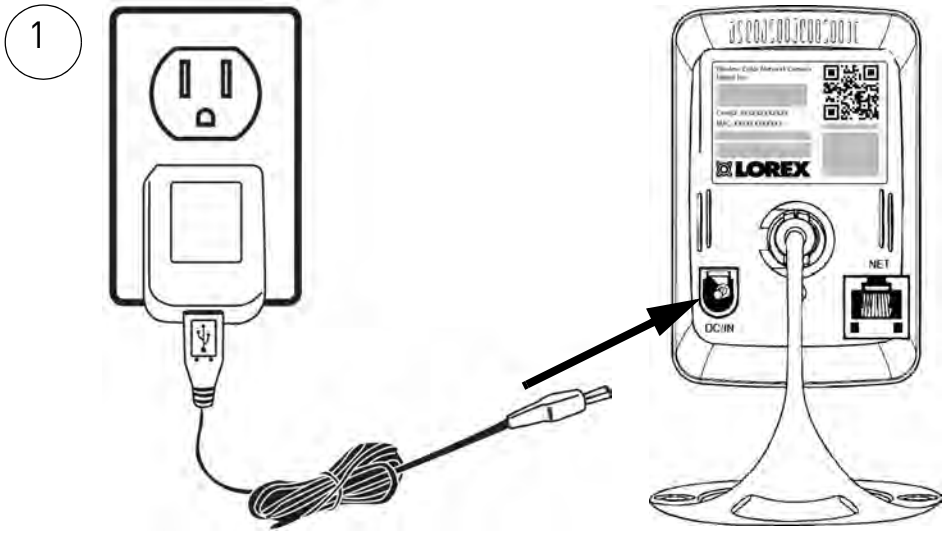



Enter a new password, confirm your password, and then tap Done

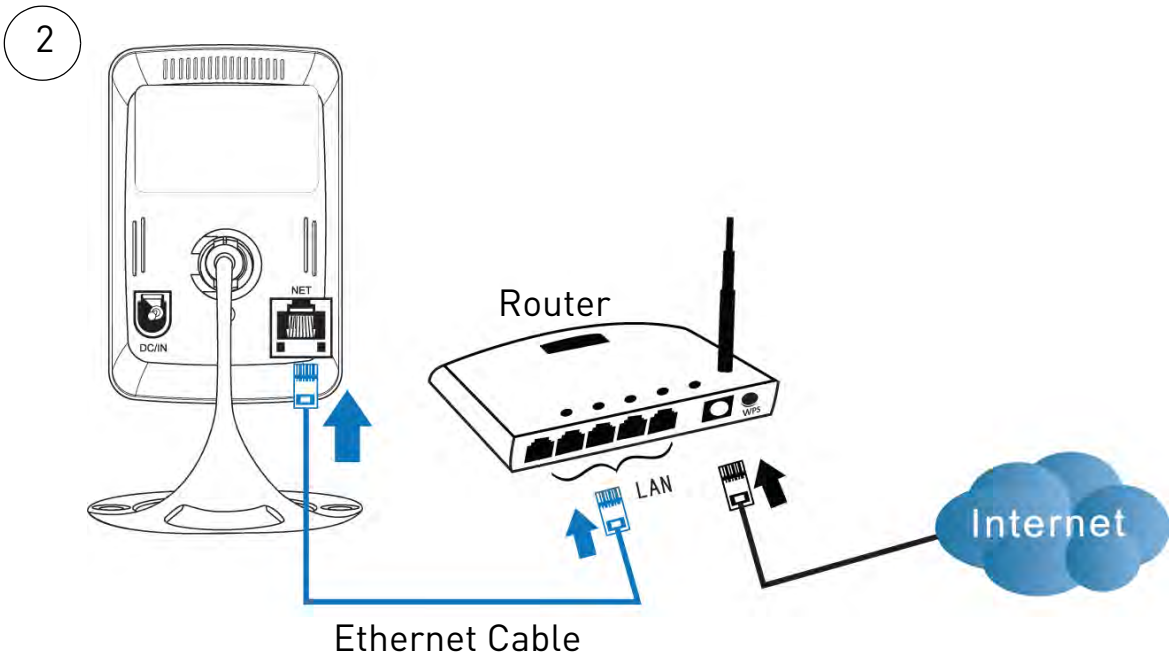
Tap the name of the camera in Camera List again to connect to the camera. For details on using the iPad® app, see “iPad® App” on page 106.

## *2.2.2 ETHERNET SETUP*

1. Connect the power adapter to the camera and connect the other end to a power outlet.



2. Connect an Ethernet cable (included) to the **NET** port on the camera and connect the other end to your router (not included).




3. Download the **Lorex Ping HD** app from the App Store.

**NOTE:** Lorex Ping HD is a free application, but it requires a valid iTunes account to download. Lorex Ping requires iOS v4.0 and higher.

4. Tap the Lorex Ping icon ( ) from the home screen to open Lorex Ping. Lorex Ping opens to the Camera List.

5. Tap **+** to add a camera.


6. Under **Name**, enter a name for your camera. This can be anything of your choice.

7. Under **ID**, press the QR code button ( ) and line up the QR code printed on the back of the camera using the camera on the iPad. The CamID will automatically be entered.

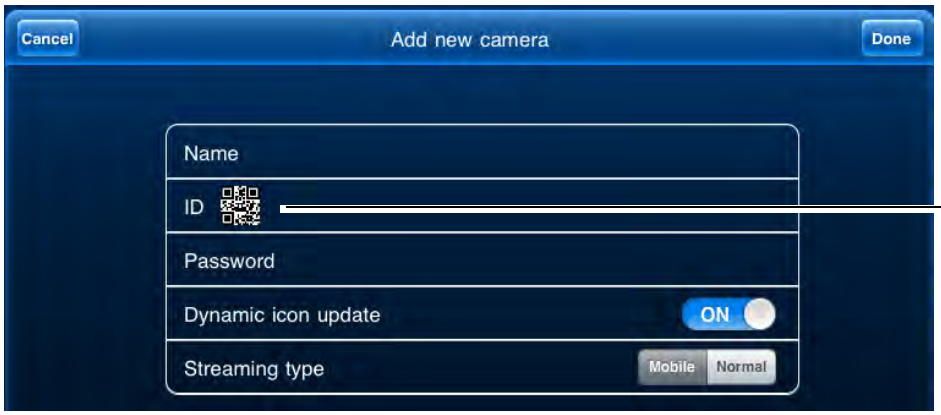

Press to scan the QR code printed on the back of the camera, OR manually enter the CamID printed on the camera


Line up the QR code to the middle using the iPad® camera

- **OR:** Manually enter the **CamID** printed on the camera.

**NOTE:** QR code setup is not compatible with the 1st generation iPad®. If you have a 1st generation iPad®, manually enter the CamID printed on the camera into ID.

8. Under **Password**, enter the camera password. If this is the first time connecting to the camera, enter **lorex**. Press **Done**.




Enter the camera password. The default password is lorex.

9. Tap the name of the camera in the Camera List to connect to the camera. Lorex Ping connects to the camera.

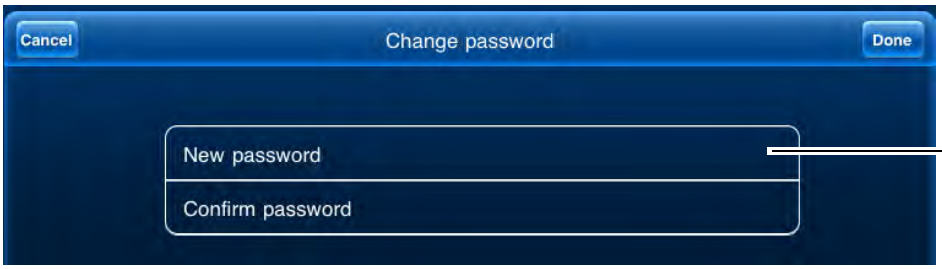
Tap the name of the camera to connect


10. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.


Tap OK

English

11. Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **Done**.




Enter a new password, confirm your password, and then tap Done

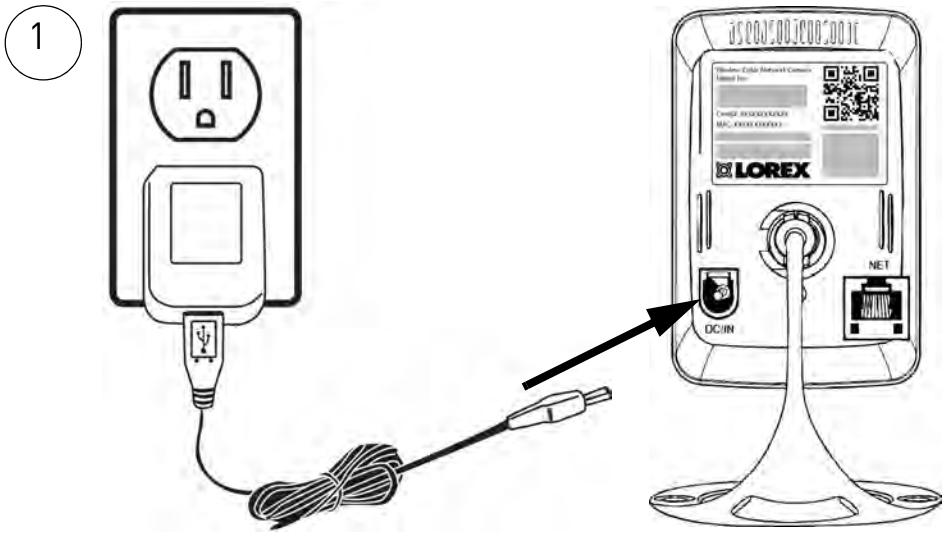
Tap the name of the camera in Camera List again to connect to the camera. For details on using the iPad app, see “iPad® App” on page 106.

# 2.3 CONNECTING TO YOUR CAMERA ON ANDROID™

Follow the steps below to connect to your camera on an Android™ device using Ethernet or WiFi.

## *2.3.1 WIFI SETUP*

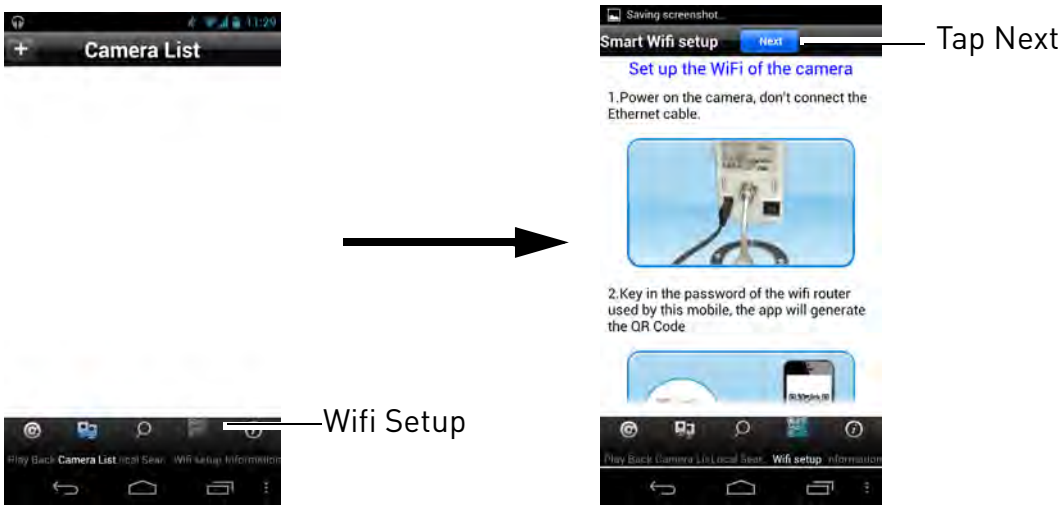
1. Connect the power adapter to the camera and connect the other end to a power outlet. Do not connect the Ethernet cable.



2. Connect your Android™ device your WiFi network. See your device's user guide for details on connecting to WiFi networks.
3. Download the free **Lorex Ping** app from the Google Play Store.

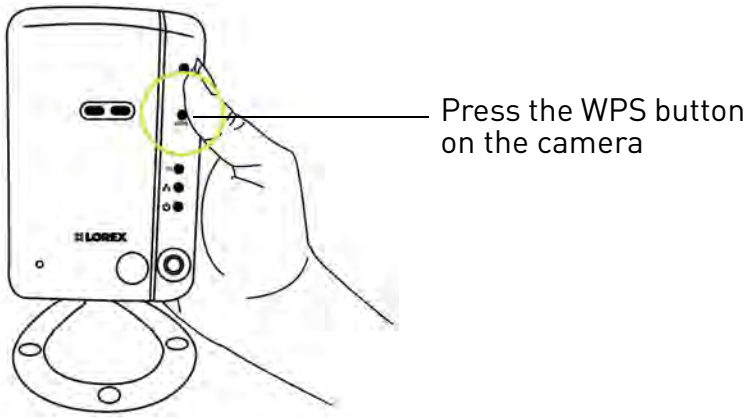
**NOTE:** Lorex Ping is a free application. Lorex Ping requires Android™ v2.3 and higher.

4. Tap the Lorex Ping icon ( ) to open Lorex Ping.
5. Press **Wifi Setup** then tap **Next**.

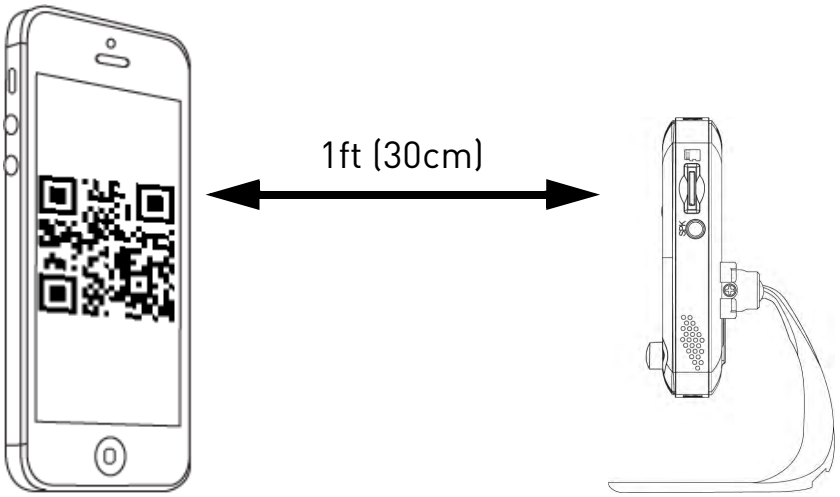



6. Enter the password for your WiFi network and press **OK**. A QR code appears on the screen with your WiFi network details.

7. Press the **WPS** button on the camera. The LEDs will start flashing.



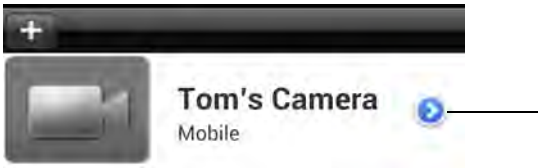

8. Place your device about 1ft (30cm) away from the camera.




The camera scans the QR code on your device to connect to the WiFi network. When the connection is successful, the camera beeps, and the message below appears on your device after a few seconds.

9. Enter a name for your camera and press **OK**.


10. Tap the camera to connect.



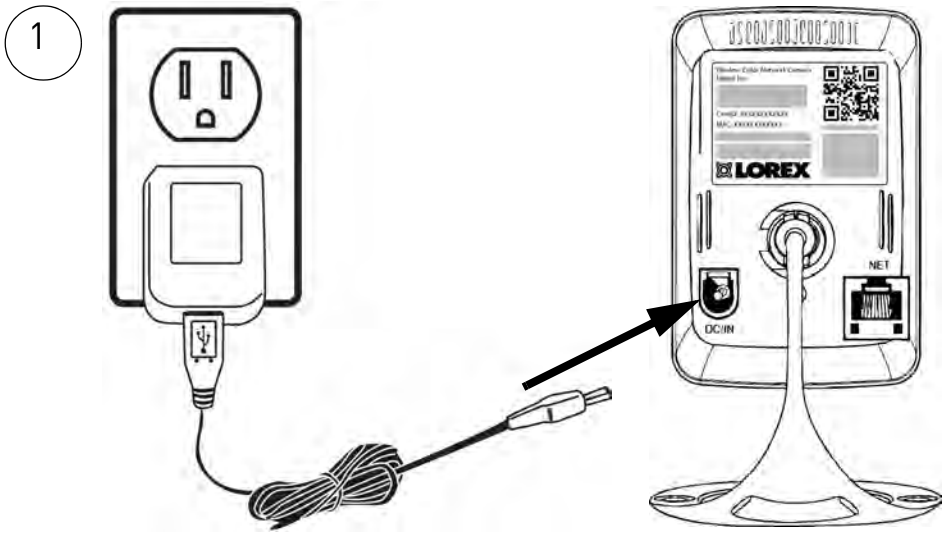
11. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.


12. Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **OK**.

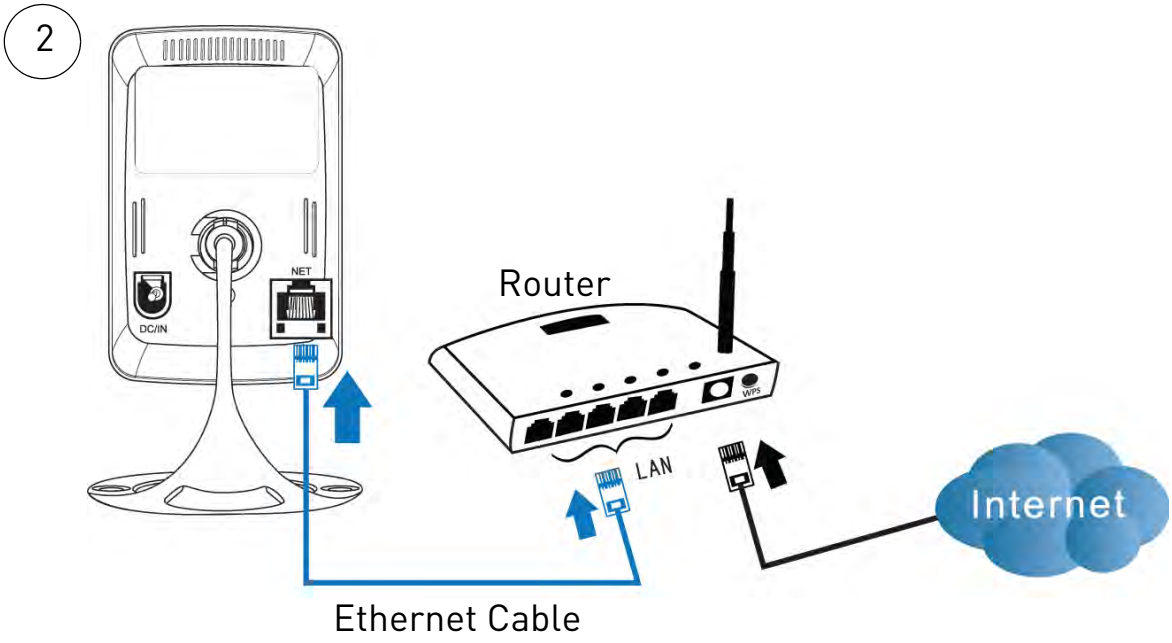

Tap the name of the camera in Camera List again to connect to the camera. Lorex Ping streams live video from your camera.

## *2.3.2 ETHERNET SETUP*

1. Connect the power adapter to the camera and connect the other end to a power outlet.



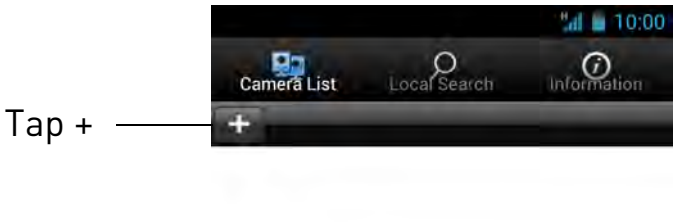

2. Connect an Ethernet cable (included) to the **NET** port on the camera and connect the other end to your router (not included).



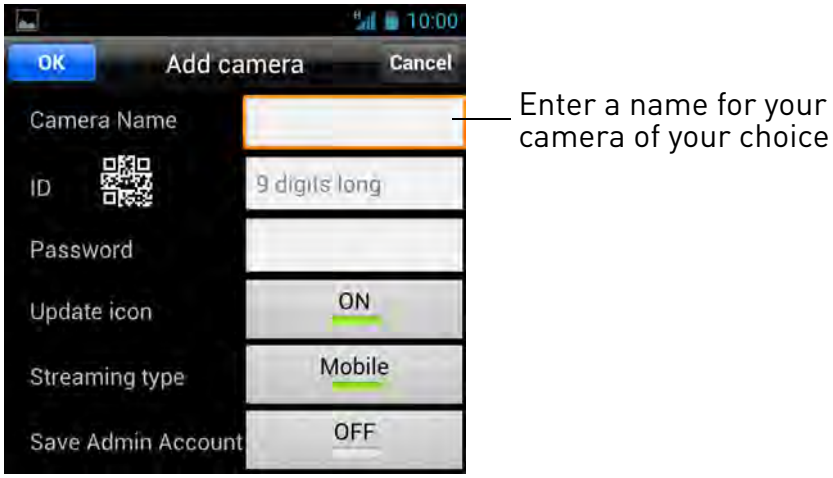

3. Download the **Lorex Ping** app from the Google Play store.

**NOTE:** Lorex Ping requires Android™ v.2.3 or higher.

4. Tap the Lorex Ping icon ( ) from the home screen or app list to open Lorex Ping. Lorex Ping opens to the Camera List.
5. Tap **+** to add a camera.

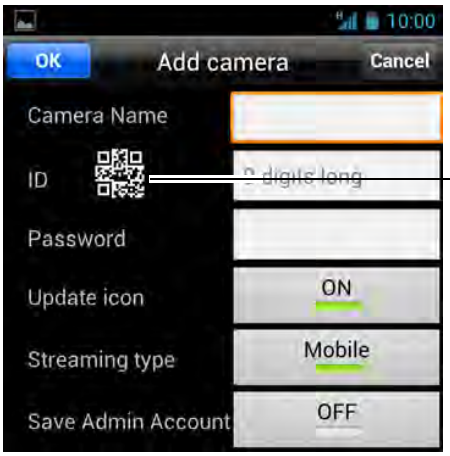



6. Under **Camera Name**, enter a name for your camera. This can be anything of your choice.

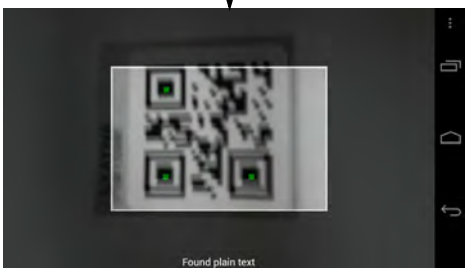



English

7. Under **ID**, press the QR code button ( ) and line up the QR code printed on the back of the camera using the camera on the Android™ phone or tablet. The CamID will automatically be entered.



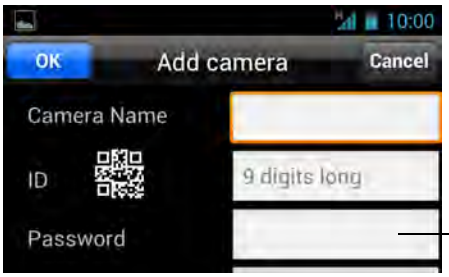

Press to scan the QR code printed on the back of the camera, OR manually enter the CamID printed on the camera




Line up the QR code to the middle using the camera on the phone or tablet

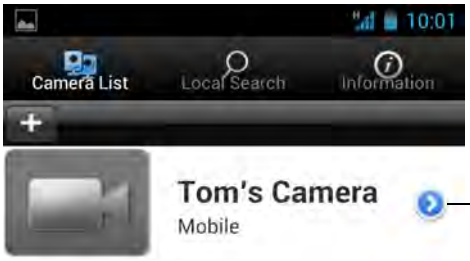
- **OR:** Manually enter the CamID printed on the camera.

8. Under **Password**, enter the camera password. If this is the first time connecting to the camera, enter **lorex**. Press **OK**.




Enter the camera password. The default password is lorex.

9. Tap the name of the camera in the Camera List to connect to the camera. Lorex Ping connects to the camera.




Tap the name of the camera to connect

10. If this is the first time connecting to the camera, you will be prompted to create your own password. Tap **OK**.


Tap OK

11. Under **New password**, enter a new password for the camera and repeat the password under **Confirm password**. Tap **OK**.


Enter a new password, confirm your password, and then tap OK

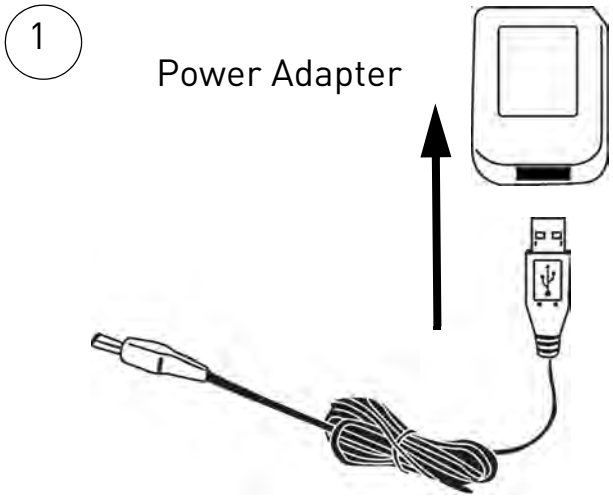
Tap the name of the camera in Camera List again to connect to the camera. For details on using the Android™ app, see "Android™ App" on page 129.

# 2.4 CONNECTING TO YOUR CAMERA ON PC

Follow the steps below to get up and running with a PC.

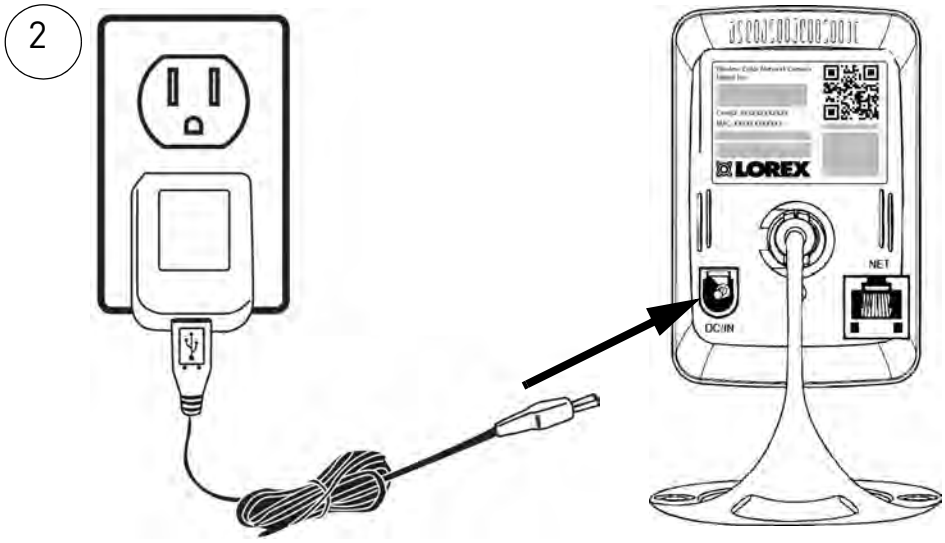
## *2.4.1 BASIC SETUP*

1. Connect the power adapter cable to the power adapter using the USB connector.




Power Adapter Cable

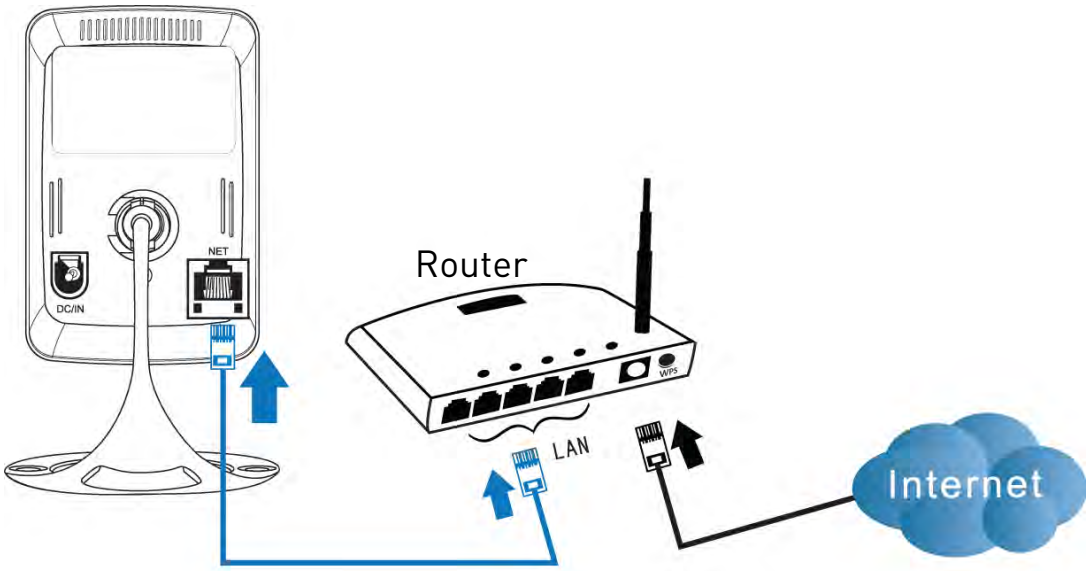
2. Connect the power adapter to a surge protector or power outlet. Connect the power adapter cable to the **DC/IN** port on the camera. The camera LED's will begin flashing.




3. **A:** Connect an Ethernet cable (included) to the **NET** port on the camera and connect the other end to an available LAN port (usually numbered 1~4) on your router (not

included). The blue Network LED on the camera will glow blue when the camera is connected to your network.

3A



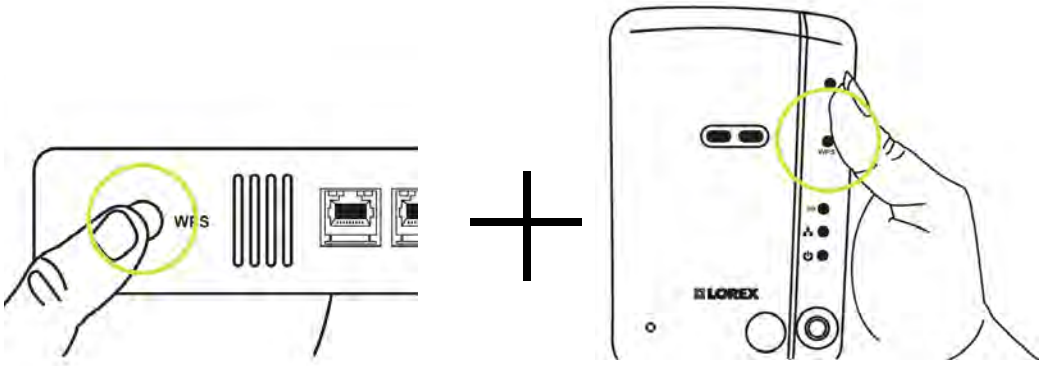

Ethernet Cable

- For instructions on setting your camera up for WiFi, see "PC WiFi Setup" on page 31.

**OR:**

**B: OPTIONAL:** If your router supports WPS, press and hold the **WPS** button on your router until the WPS light turns on. Then, press the **WPS** button on the camera within 1 minute. The camera will automatically connect to your WiFi network and the blue Network LED on the camera will turn on.

3B




Press and hold the WPS button on the router

Then, press the WPS button on the camera

**NOTE:** Not all routers support WPS, and the location of the WPS button on your router depends on your router model. Check your router's instruction manual for details.

## *2.4.2 CONNECTING TO YOUR CAMERA ON PC*

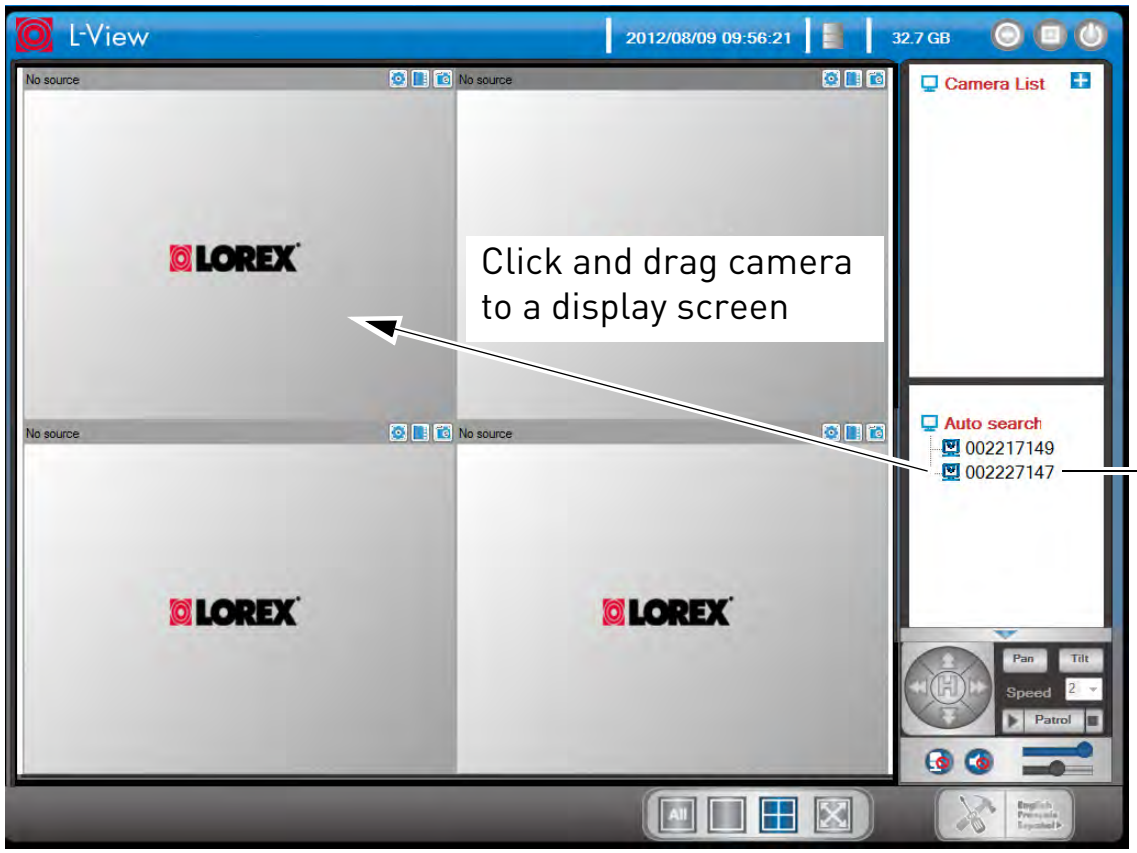
**NOTE:** For PC system requirements, see "System Requirements" on page 42.

1. Install the L-View software from the CD or download it from www.lorextechnology.com.
2. Double-click the L-View icon 

to run L-View.

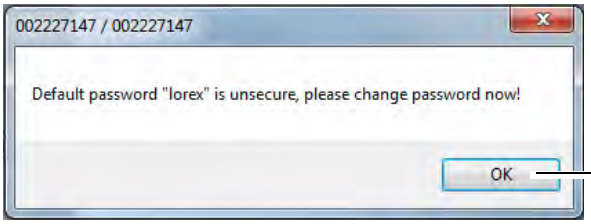
**Connecting to your camera over the local area network (LAN):**

1. When L-View opens, it scans the local network for connected cameras. Connected cameras are shown under Auto Search.
2. Double-click the camera under Auto Search or click and drag the camera to a desired screen on the display grid to connect to the camera.

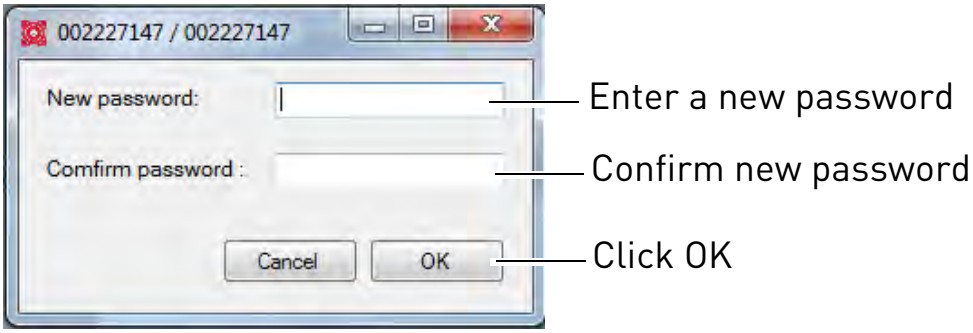



3. Enter the camera password. If this is the first time connecting to the camera, the password is **lorex**. Click **OK**.

4. If you have connected to this camera before, L-View connects to the camera. If this is the first time connecting to the camera, L-View will prompt you to create your own password for the camera. Click **OK**.




5. Under **New Password**, enter a password that will be used for the camera. Under **Confirm Password**, enter the password again. Click **OK**.



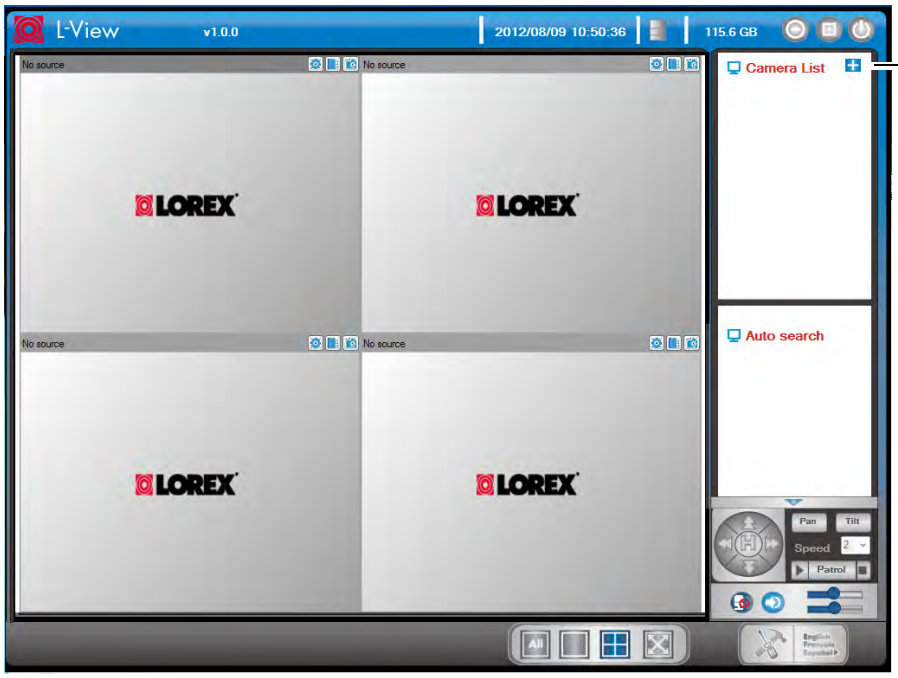

6. Double-click the camera again under Auto Search to connect. Enter the new password for the camera then click **OK** to connect. L-View connects to the camera. If you would like to save the camera password in L-View, see "Saving Camera Passwords" on page 48.

### Connecting to a Camera Over the Internet (PC)

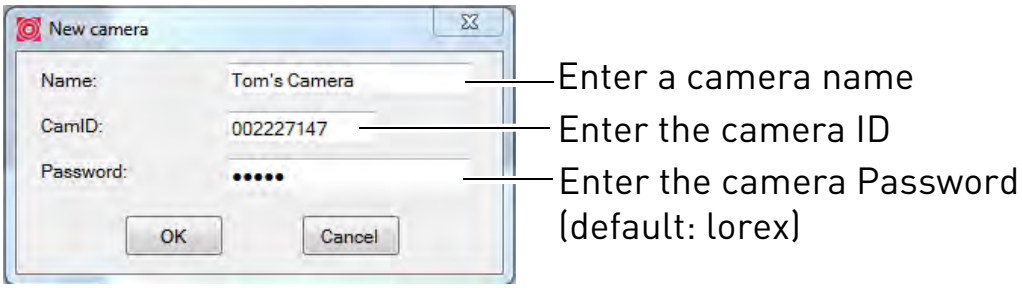
1. Double-click the L-View icon 

to run L-View.

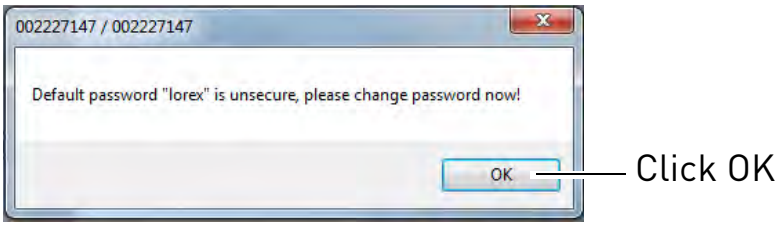
2. Click **+** next to Camera List.



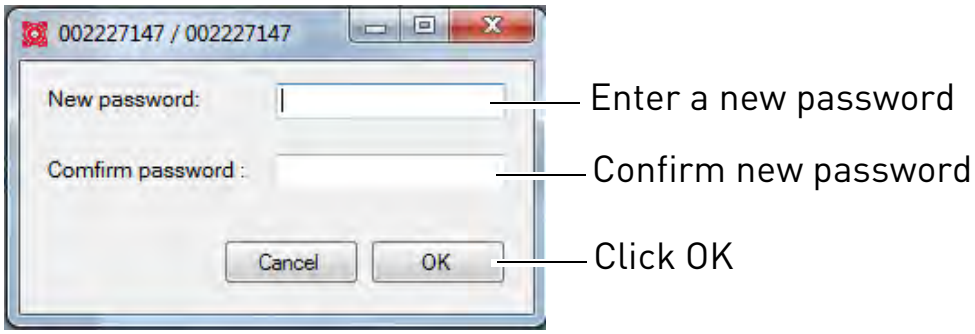

3. Under **Name**, enter a camera name of your choice.
4. Under **CamID**, enter the Cam ID number printed on the camera.
5. Under **Password**, enter the camera password. If this is the first time connecting to the camera, the password is **lorex**. Click **OK**.




6. Double-click the camera or drag the camera to a display screen to connect to the camera.
7. If you have connected to this camera before, L-View connects to the camera. If this is the first time connecting to the camera, L-View will prompt you to create your own password for the camera. Click **OK**.



8. Under **New Password**, enter a password that will be used for the camera. Under **Confirm Password**, enter the password again. Click **OK**.



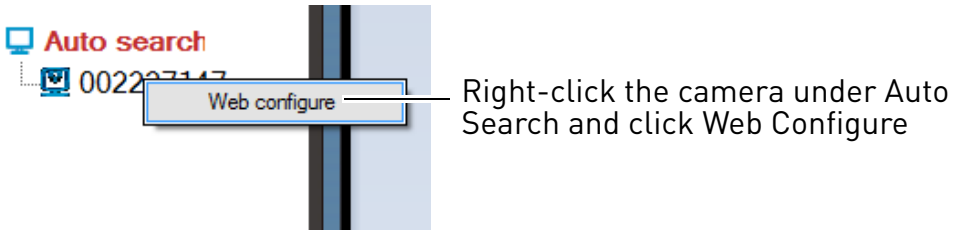

9. Double-click the camera again under Camera List to connect. For detailed instructions on using L-View, see "L-View 104 for PC" on page 42.



## *2.4.3 PC WIFI SETUP*

The camera must be connected to your router using an Ethernet cable before you can set it up to use WiFi.

1. Install L-View on a PC in your local network (must be connected to the same router as the camera) and connect to the camera.
2. Right-click on the camera ID in the Auto Search area and click **Web Configure**.



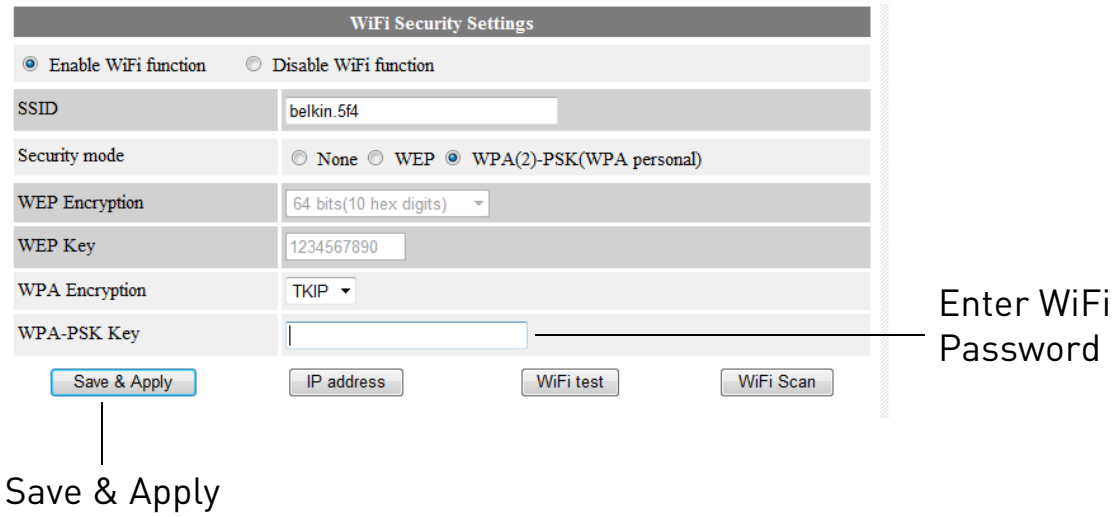

3. Enter the camera admin user name and password. By default, the admin user name is **admin** and the admin password field is **left blank**. Click **Log in**. The Web Configure interface opens in your default web browser.

**NOTE:** Your camera admin user name and password differs from the password used to connect to your camera to view video.

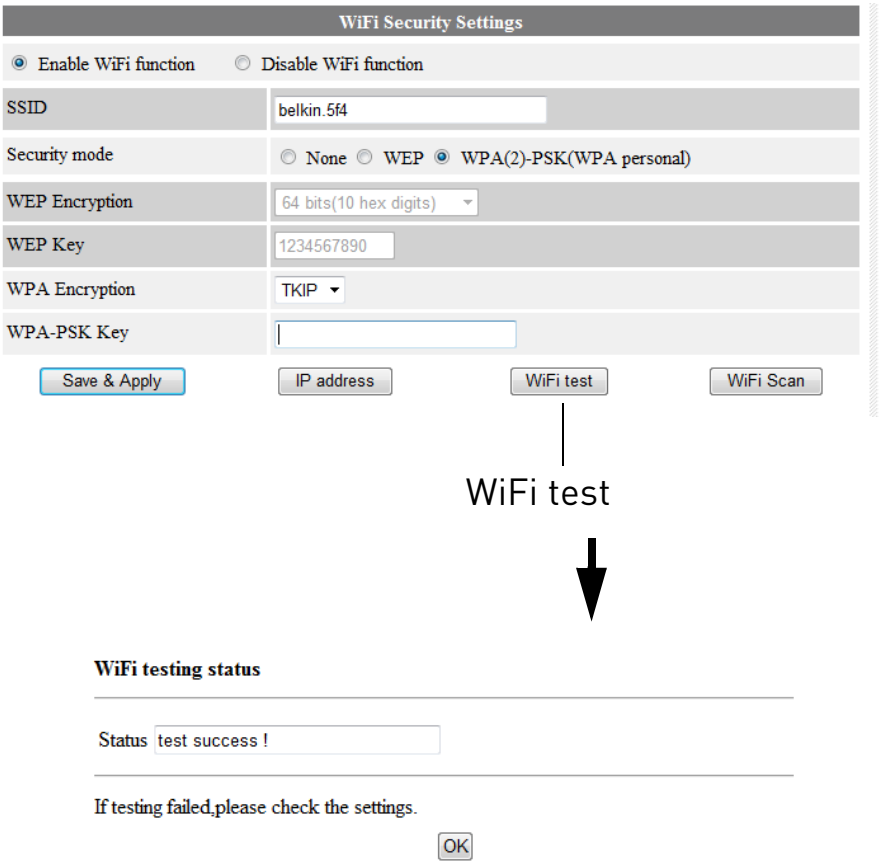
4. Click on **Network** and then **WiFi Security**.

5. Click **WiFi Scan** and select your WiFi network from the list.


6. Under **WPA-PSK Key** or **WEP Key**, enter the WiFi password. Click **Save and Apply**.



7. Click **WiFi Security** again and click **WiFi Test** (this may take up to 60 seconds).



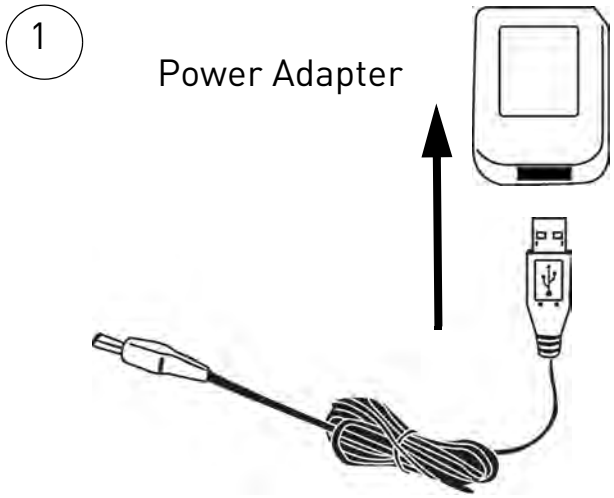

8. When successful, **Status** will say **Test Success**. If unsuccessful, double check your wireless password and make sure your camera is close enough to the wireless router to get a good signal.
9. Remove the Ethernet cable from the camera wait 60 seconds and then reconnect to your camera in L-View.

# 2.5 CONNECTING TO YOUR CAMERA ON MAC

Follow the steps below to get up and running on a Mac computer.

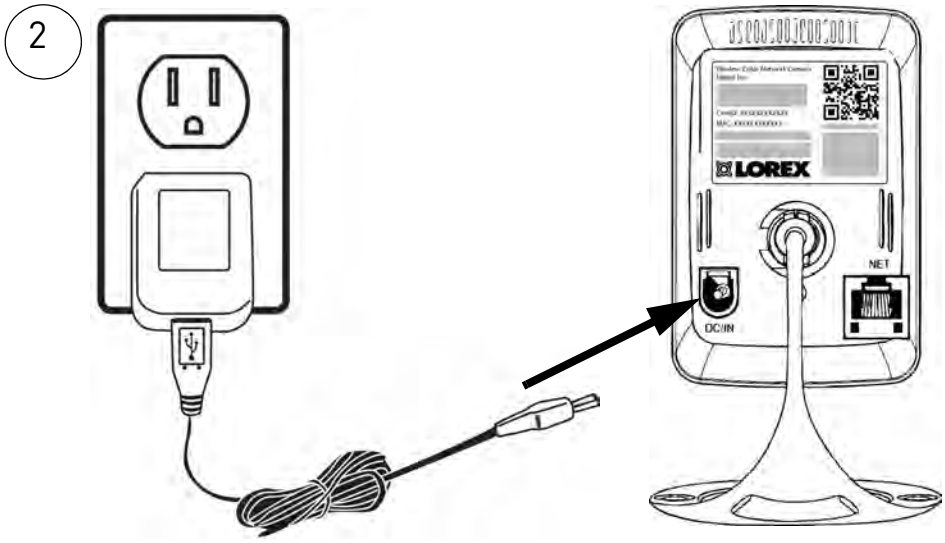
## *2.5.1 BASIC SETUP*

1. Connect the power adapter cable to the power adapter using the USB connector.




Power Adapter Cable

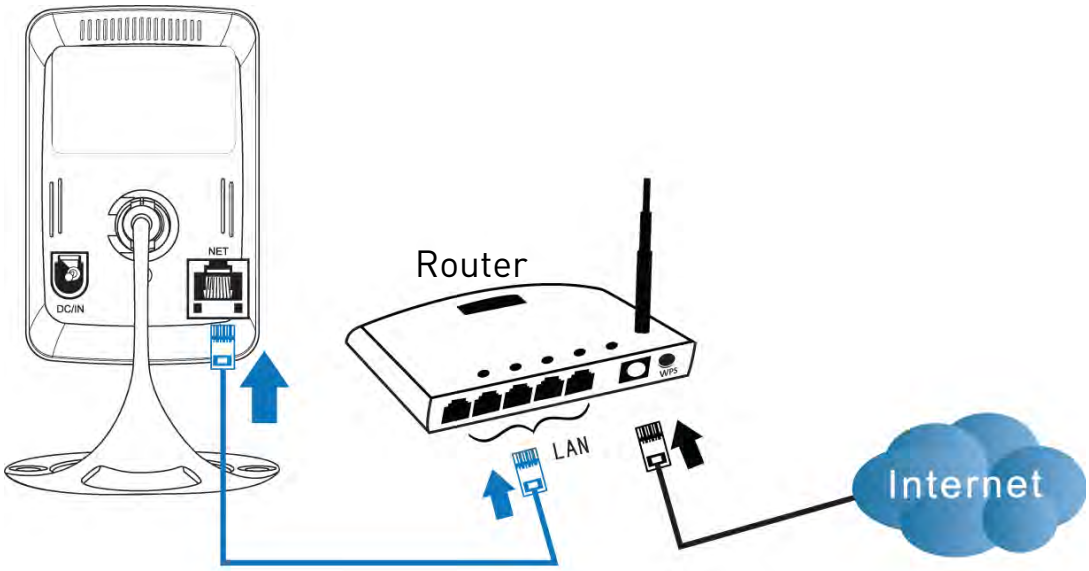
2. Connect the power adapter to a surge protector or power outlet. Connect the power adapter cable to the **DC/IN** port on the camera. The camera LED's will begin flashing.




3. **A:** Connect an Ethernet cable (included) to the **NET** port on the camera and connect the other end to an available LAN port (usually numbered 1~4) on your router (not

included). The blue Network LED on the camera will glow blue when the camera is connected to your network.

3A



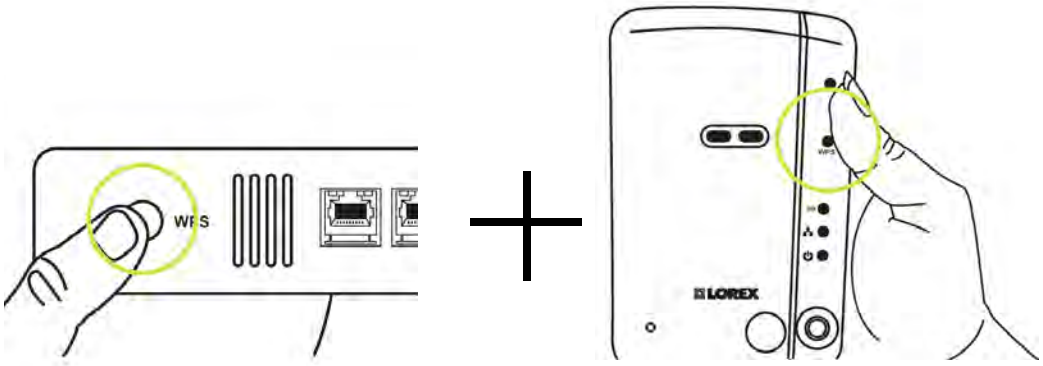

Ethernet Cable

- For instructions on setting your camera up for WiFi, see "Mac WiFi Setup" on page 39.

**OR:**

**B: OPTIONAL:** If your router supports WPS, press and hold the **WPS** button on your router until the WPS light turns on. Then, press the **WPS** button on the camera within 1 minute. The camera will automatically connect to your WiFi network and the blue Network LED on the camera will turn on.

3B




Press and hold the WPS button on the router

Then, press the WPS button on the camera

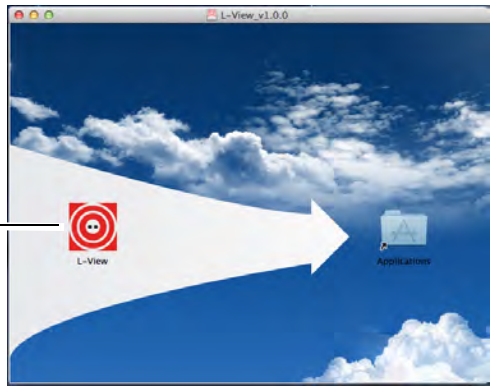
**NOTE:** Not all routers support WPS, and the location of the WPS button on your router depends on your router model. Check your router's instruction manual for details.

## 2.5.2 CONNECTING TO YOUR CAMERA ON A MAC

NOTE: For Mac system requirements, see "System Requirements" on page 42.

1. Install the L-View software from the CD or download it from www.lorextechnology.com.
2. Extract the installer file and double-click it to run.
3. Click and drag the L-View icon to **Applications** to install.

Click and drag L-View to Applications




### Connecting to your Camera on the Local Network (Mac)

**NOTE:** Your computer must be on the same network as the camera to perform the steps below.

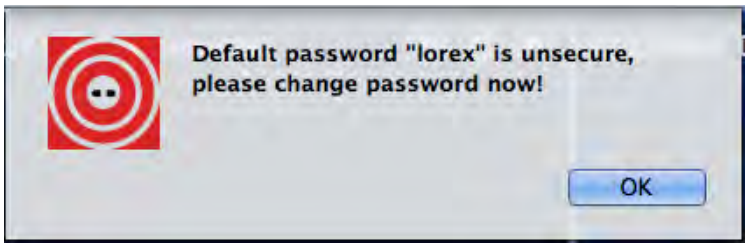
1. Open L-View ( ) from your Applications list. L-View scans for cameras on your local network.
2. Double-click the camera ID.

Double-click the camera ID

3. Enter the password (default: **lorex**) and then click **OK** to connect. L-View connects to your camera and streams live video.

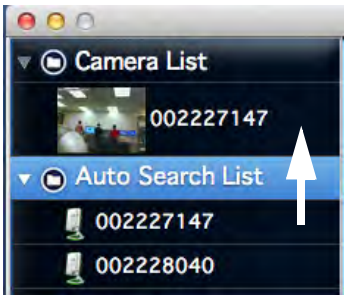

Enter the password (default: **lorex**) and then click OK

4. If this is the first time connecting to the camera, you are prompted to change your password. Click **OK**.

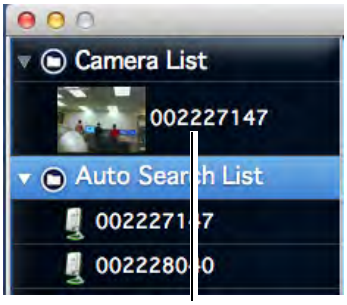



5. Enter a new password and click **OK**.
6. Double-click the camera ID under Auto Search again, enter the new password, and click **OK**. L-View connects to your camera and streams live video.

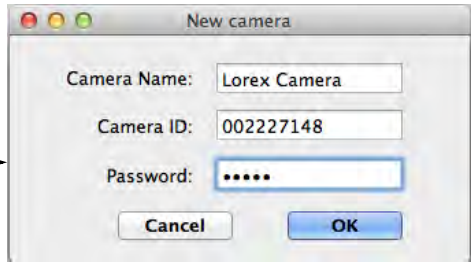
**TIP:** To save the camera password in L-View, click and drag the ID from the Auto Search List to the Camera List. Then, right-click the ID and click **ID/Password settings**. Enter the camera password. If you want, you can also enter a Camera Name of your choice for your camera. Click **OK**.




Click and drag camera ID from Auto Search List to Camera List




Right-click and select ID/Password settings

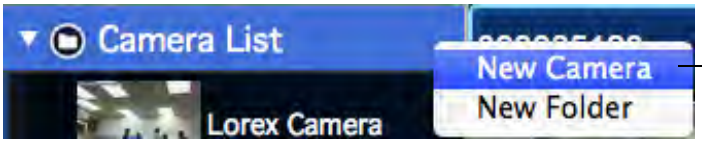



Enter a name of your choice. Enter the camera password and click OK

English

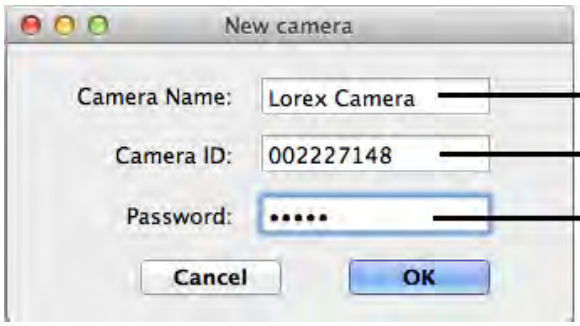
**Connecting to your Camera over the Internet (Mac)**

1. Right-click **Camera List** and then click **New camera**.




Right-click Camera List and click New Camera

2. Under **Camera Name**, enter a name for your camera of your choice.
3. Under **Camera ID**, enter the CamID number printed on the label on the back of your camera.
4. Under **Password**, enter the camera password (default: **lorex**) and then click **OK**.

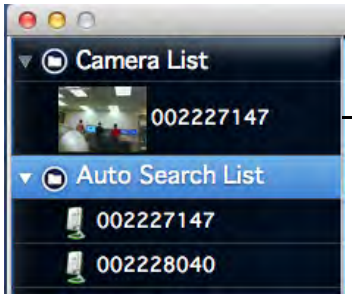



Enter a name of your choice

Enter the camID on the camera label

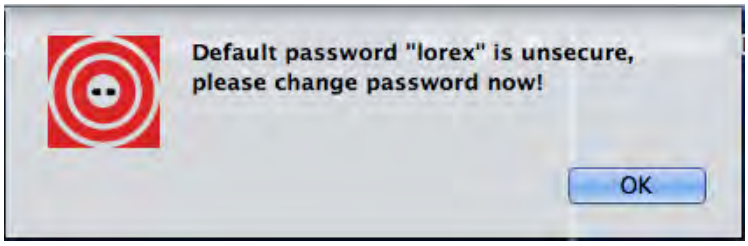
Enter the camera password (default: lorex) and click OK

5. Double-click the camera to open it in L-View.




Double-click the camera

6. If this is the first time connecting to the camera, you are prompted to change your password. Click **OK**.




7. Enter a new password and click **OK**. L-View connects to your camera and streams live video. For more details on using L-View for Mac, see "L-View for Mac" on page 67.

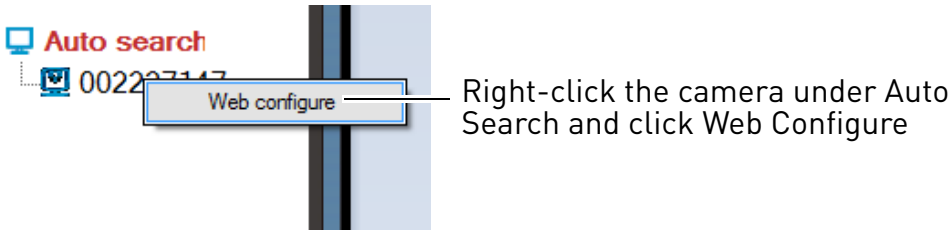
**NOTE:** To connect to multiple cameras, click to select a display area. The area becomes highlighted. Then, double-click the camera to open it in the selected area.




## *2.5.3 MAC WIFI SETUP*

The camera must be connected to your router using an Ethernet cable before you can set it up to use WiFi.

1. Install L-View on a Mac in your local network (must be connected to the same router as the camera) and connect to the camera.
2. Right-click on the camera ID in the Auto Search area and click **Web Configure**.



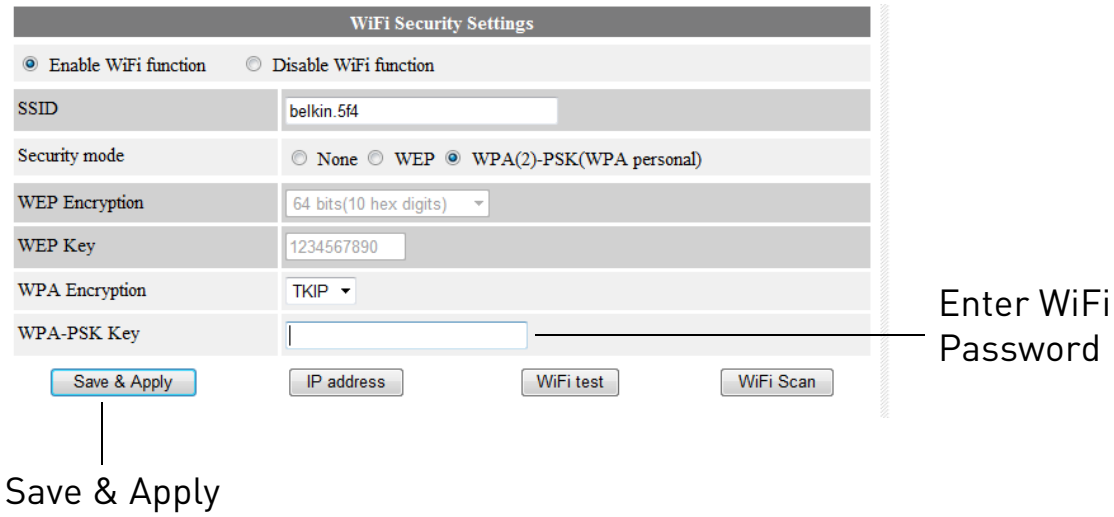

3. Enter the camera admin user name and password. By default, the admin user name is **admin** and the admin password field is **left blank**. Click **Log in**. The Web Configure interface opens in your default web browser.

**NOTE:** Your camera admin user name and password differs from the password used to connect to your camera to view video.

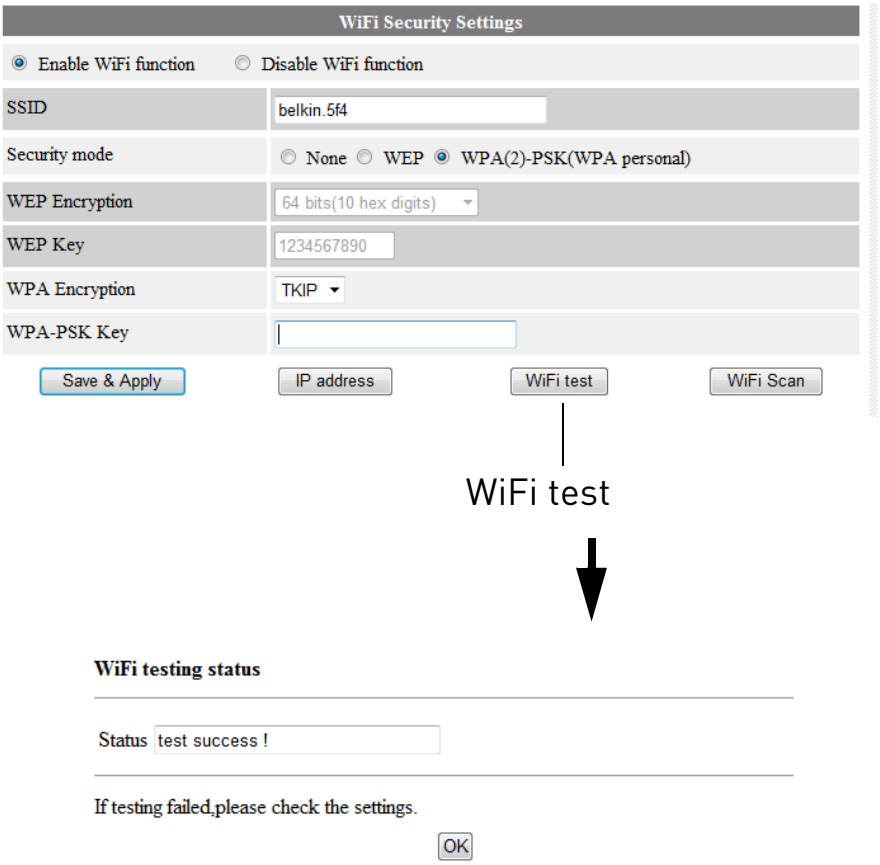
4. Click on **Network** and then **WiFi Security**.

5. Click **WiFi Scan** and select your WiFi network from the list.


6. Under **WPA-PSK Key** or **WEP Key**, enter the WiFi password. Click **Save and Apply**.



7. Click **WiFi Security** again and click **WiFi Test** (this may take up to 60 seconds).




8. When successful, **Status** will say **Test Success**. If unsuccessful, double check your wireless password and make sure your camera is close enough to the wireless router to get a good signal.
9. Remove the Ethernet cable from the camera wait 60 seconds and then reconnect to your camera in L-View.

# 3. L-VIEW 104 FOR PC

L-View is a PC client software that supports up to 4 cameras. L-View is provided on the CD or available as a free download from www.lorextechnology.com.

For instructions on installing and connecting to your camera using L-View, see "Connecting to your Camera on PC" on page 28.

**NOTE:** For Mac software instructions, see "L-View for Mac" on page 67.

## 3.1 SYSTEM REQUIREMENTS

| Description | Minimum System Requirements |
|---|---|
| CPU | 2.0 GHz (dual-core recommended) |
| Memory | 2GB |
| Operating System | Windows XP SP 2 and higher<br>Windows 7 Basic, Home Premium, Ultimate<br>Windows 8 |
| Hard Drive | Minimum 5~10 GB free for recordings and snapshots |

# 3.2 L-VIEW FOR PC INTERFACE


1. **Display:** Shows live or recorded video from your camera(s).
   - Click to select a camera and scroll up/down to zoom in/out. When the camera is zoomed in, click and drag the camera image to pan the camera.
   - Double-click to open the display area in full-screen. Double-click again to exit full-screen.
   - Right-click to open the display sub-menu. See "Display Sub-Menu" on page 46.
2. **Image/Recording Controls:**
   - **Video Settings:** Click to edit the camera's video settings. See "Configuring Camera Video Settings" on page 56.

English

-  **microSD:** Click to open a list of recordings saved on the camera's microSD card (not included). See "Playing Back Recordings on the microSD card with L-View" on page 55.
-  **Snapshot:** Click to save a still image screenshot of the camera. To access Snapshots, see "Directories (Opening or Changing the Snapshot/Recording Folder)" on page 62. Snapshots are saved in .png format.
-  **Record:** Click to start/stop manual recording. For details, see "Recording to your PC's Hard Drive" on page 52.

3. **Time and Date:** Show the current time and date on the computer. Note that the camera time and date may differ. For instructions on setting the time and date on the camera, see "Date/Time" on page 170.
4. **Minimize/Restore**
5. **Maximize/Revert to Window**
6. **Exit**
7. **Camera List:** Shows list of saved cameras. Available cameras are in blue. Cameras in red are not available. If a camera appears in red, check the network connection. For more details, see "Camera List (Managing Cameras)" on page 47.

**NOTE:** Cameras may appear in red before you have connected to them the first time.

8. **Auto Search:** Auto Search shows cameras located on your local network (LAN).
   - Double-click the camera name or click and drag the camera to the display area to view the camera.
   - Drag the camera to the Camera List to save the camera.
   - Right-click the camera ID and select Web Configure to configure the camera settings using a browser. See "Configuring Camera Settings using a Web Browser" on page 152.
9. **Pan/Tilt/Zoom Controls:** Controls for compatible PTZ cameras (not included).
10. **Volume Controls:**
    - Click  to activate 2-way-audio (intercom) feature and click again to deactivate 2-way-audio. Note that turning on 2-way-audio will mute audio from the camera.
    - Click  to mute audio from the camera. Click again to unmute audio from the camera.

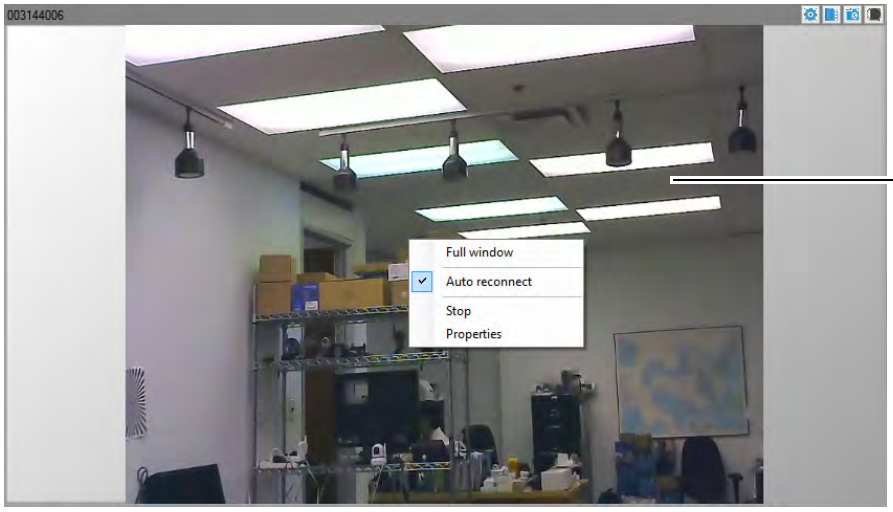
- Use the top volume slider to control the volume for the camera speaker (not included) when the 2-way-audio is activated.
- Use the bottom volume slider to control the volume of audio coming from the camera.

11. **L-View Controls:**
    -  **L-View Settings:** Click to open settings for L-View. See "Configuring L-View" on page 62.
    -  **L-Play:** Click to open L-Play to view video files saved on your computer hard drive. See "L-Play: Playing back Video from your PC's Hard Drive" on page 53.
    -  **Language Selector:** Click to select the language for L-View.
12.  **All Camera Action:** Click to perform an action on all cameras.
13.  **Split-Screen Selectors:** Click  to select single camera view or  to select 4-camera view.
14.  **Full Screen:** Click to open the camera display area in full-screen. Press **ESC** to exit full-screen.

English

## *3.2.1 DISPLAY SUB-MENU*

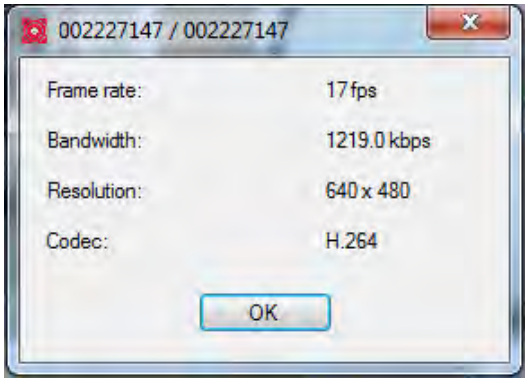
The Display sub-menu opens when you right-click on a camera's display area. It contains additional camera controls.




Right-click on a camera in the display area to open the Display sub-menu

**The Display sub-menu contains the following controls:**

- **Full window:** Open the camera in single camera view.
- **Auto reconnect:** L-View will attempt to reconnect to the camera if it becomes disconnected.
- **Stop:** Disconnect from the camera.
- **Properties:** Click to view video properties.




Video Properties

### *3.2.2 ALL CAMERA ACTION*

Press  to open the All Camera Action menu.



**The All Camera Action Menu contains the following controls:**

- **Snapshot all:** Take a snapshot from all connected cameras.
- **Play all:** Connect to all cameras selected in display grid.
- **Pause all:** Pause video for all connected cameras. Click **Pause all** again to resume video.
- **Disconnect all:** Disconnect from all connected cameras.
- **Clear all connection info:** Remove all cameras from the display grid.

# 3.3 CAMERA LIST (MANAGING CAMERAS)

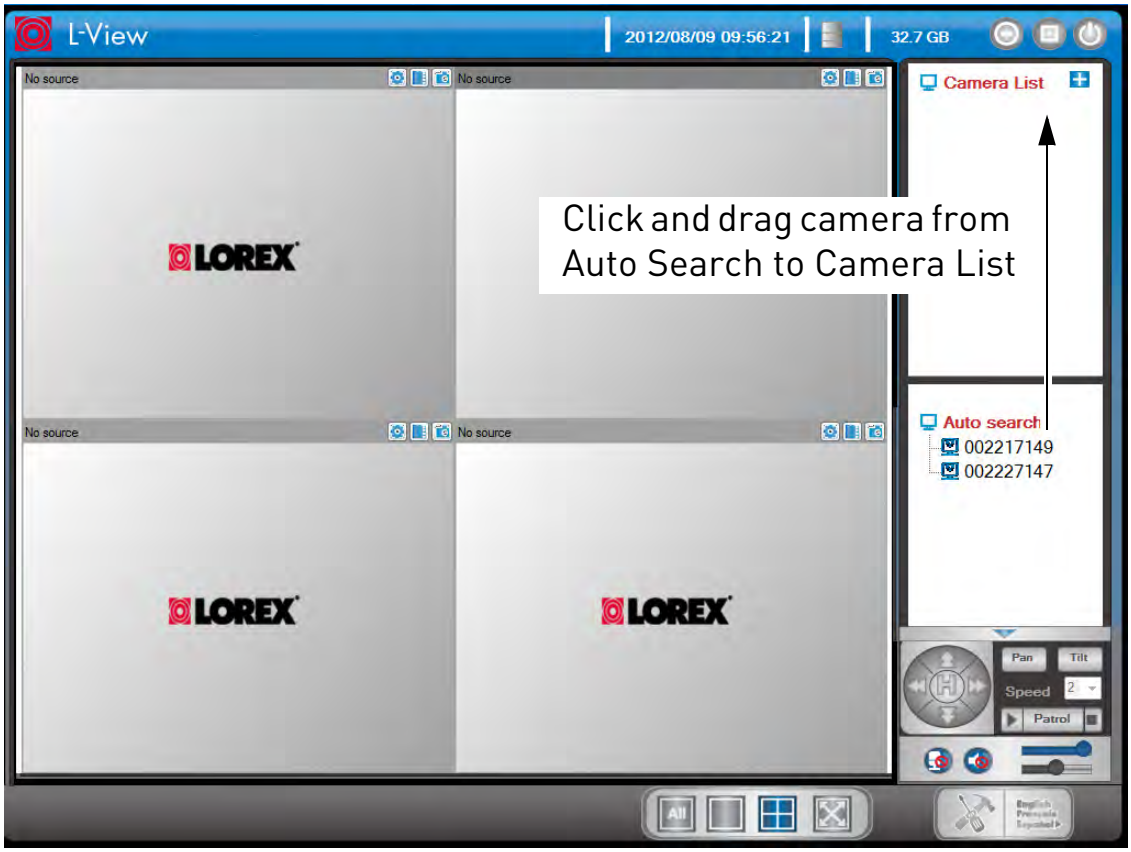
The Camera List is used to save connection information for your cameras, so you don't have to re-enter the ID or password each time you connect. The Camera List also allows you to configure certain camera settings.

Cameras connected to the Internet or local network are shown in blue in the camera list. Cameras not connected are shown in red. If your camera is red, check the network connection.

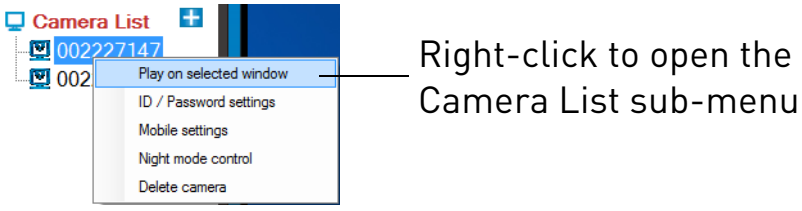
**NOTE:** Cameras may appear in red before you have connected to them the first time.

## 3.3.1 ADDING CAMERAS TO CAMERA LIST

- If the camera is on the local network, click and drag a camera from the Auto Search list to Camera List to add it.




- If the camera is not on the local network (i.e. you are connecting to it over the Internet), see "Connecting to a Camera Over the Internet (PC)" on page 29 to add the camera to the Camera List.
- Right-click on your camera to open the Camera List sub-menu. See below for instructions.



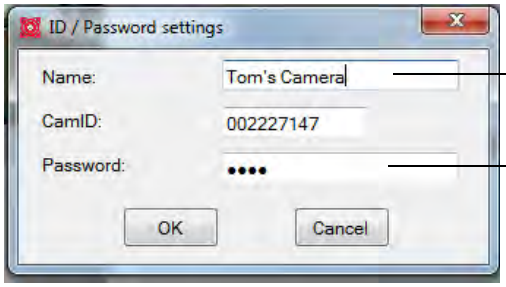

## 3.3.2 SAVING CAMERA PASSWORDS

You can use the Camera List sub-menu to save the camera's password in L-View, so you don't have to enter the password to connect to the camera.

**NOTE:** To change the camera's password, see "Video Settings" on page 156.

**To save the camera password:**

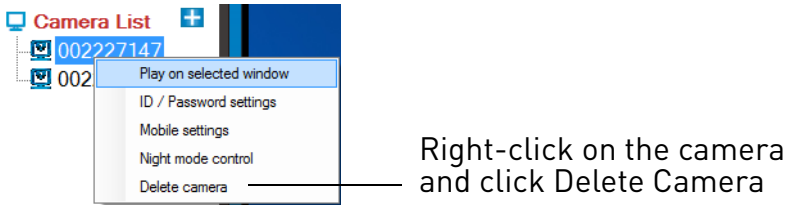
1. Right-click on the camera in Camera List and click **ID/Password settings**.
2. Under **Name**, enter a name for the camera that will appear in Camera List. This can be anything of your choice.
3. Under **Password**, enter the camera password to save the password in L-View.




4. Click **OK**.

## *3.3.3 DELETING CAMERAS*

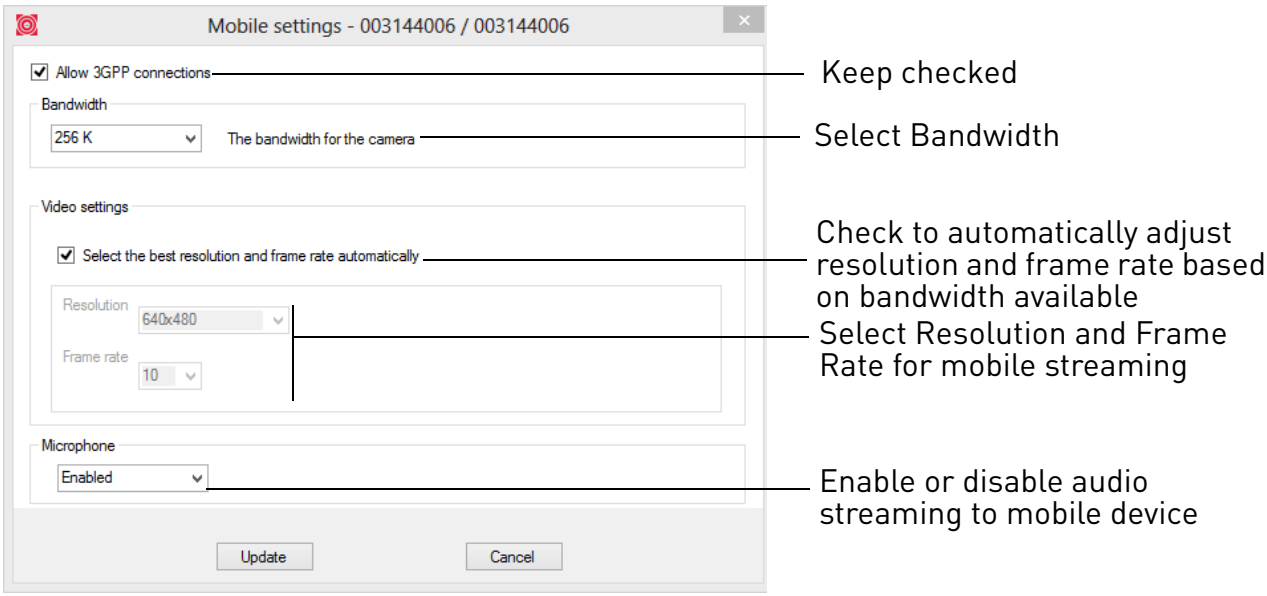
1. Right-click on the camera in Camera List and click **Delete Camera**.




2. Click **Delete** to confirm.

## *3.3.4 CONFIGURING MOBILE STREAMING SETTINGS*

Configure streaming settings when connecting using a smartphone or tablet.

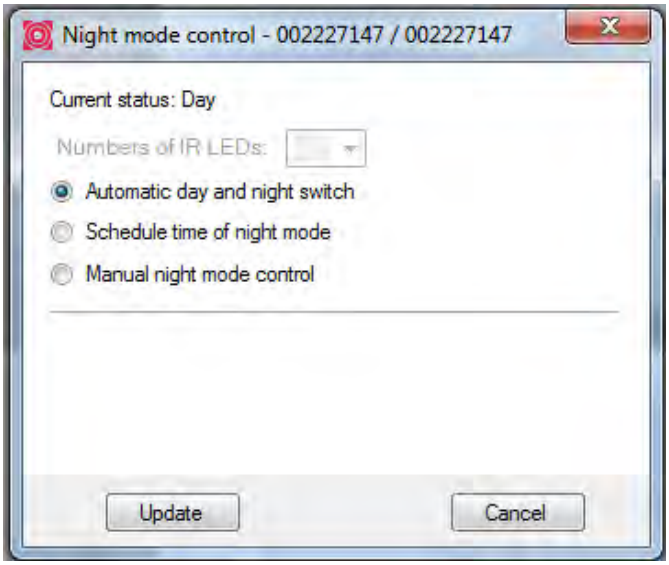



**To configure mobile streaming settings:**

1. Right-click on the camera you want to configure and click **Mobile settings**.
2. Ensure Allow 3GPP connections is checked. If this setting is unchecked you will not be able to connect to the camera with a smart phone or tablet.
3. Under **Bandwidth**, select your available mobile bandwidth. If you are primarily connecting using WiFi, you may set this setting higher.
4. Check **Select resolution and frame rate automatically** to have the camera automatically select the resolution and frame rate based on available bandwidth. If you leave this unchecked, configure the following:
   - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240**, **480x360**, **640x400**, or **1024x768**.
   - Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
5. Under **Microphone**, select **Enable** to enable audio streaming to smart phones and tablets or **Disable** to disable audio streaming to smart phones and tablets.
6. Click **Update** to apply changes to your camera. Enter the admin user name (default: **admin**) and password (default: **left blank**) for the camera and click **OK**.
7. The camera will disconnect when the setting is changed. Double-click the camera in Camera List to reconnect.

## *3.3.5 CONFIGURING NIGHT MODE CONTROL*

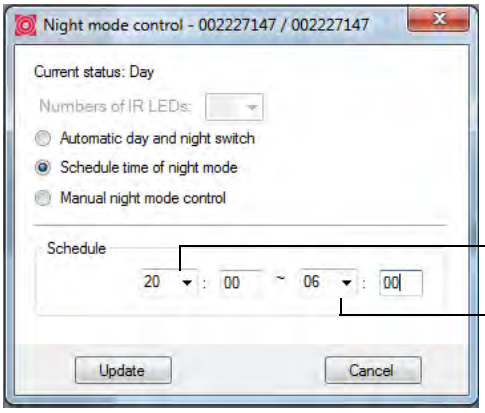
Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.






**To configure night mode settings:**

1. Right-click on the camera you want to configure and select **Night mode control**.
2. Select one of the following:
   - **Automatic day and night mode switch:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
   - **Scheduled time of night mode:** Camera will switch between day mode and night mode at a scheduled times each day. If using this option, use the first set of drop-down menus to select (in 24-hour time) the time the camera will switch to night mode and the second set of drop-down menus to select when the camera will return to day mode.

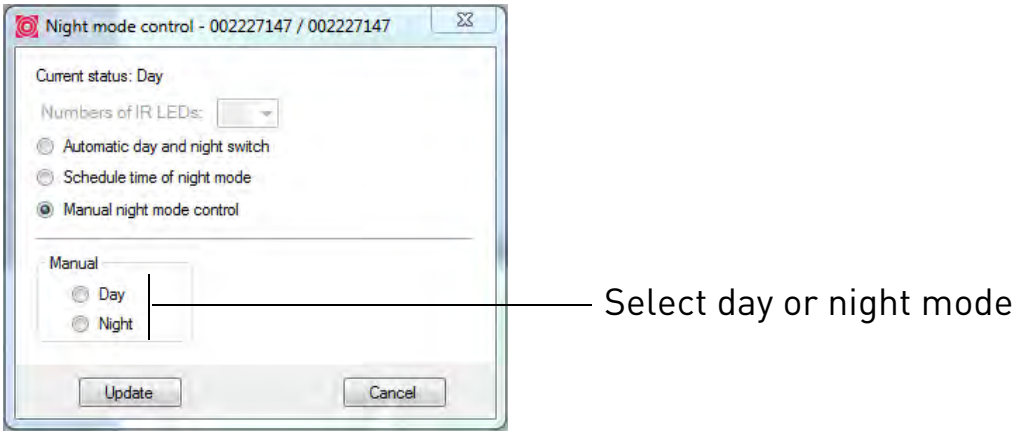



*EXAMPLE*

Start of night mode (8:00 PM)

Return to day mode (6:00 AM)

- **Manual night mode control:** Manually select day mode or night mode. If using this option, under **Mode**, select **Day** for day mode or **Night** for night mode.



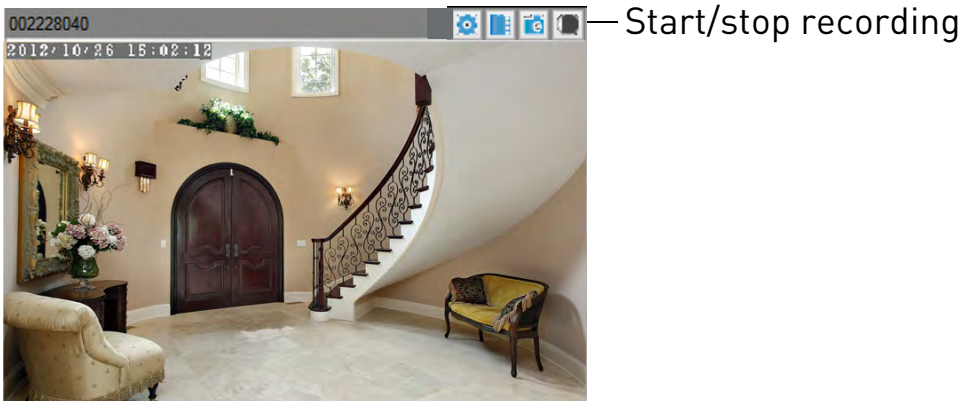

3. Click **Update** to apply changes to your camera. Enter the admin user name (default: **admin**) and password (default: **left blank**) for the camera and click **OK**.
4. The camera will disconnect when the setting is changed. Double-click the camera in Camera List to reconnect.

# 3.4 RECORDING TO YOUR PC'S HARD DRIVE

You can manually record video to your computer hard drive.

**To record to your computer's hard drive:**

- Click above the camera's video area to start recording. The recording icon will turn red ( ).
- Click again to stop recording. To playback video, see "L-Play: Playing back Video from your PC's Hard Drive" on page 53 .



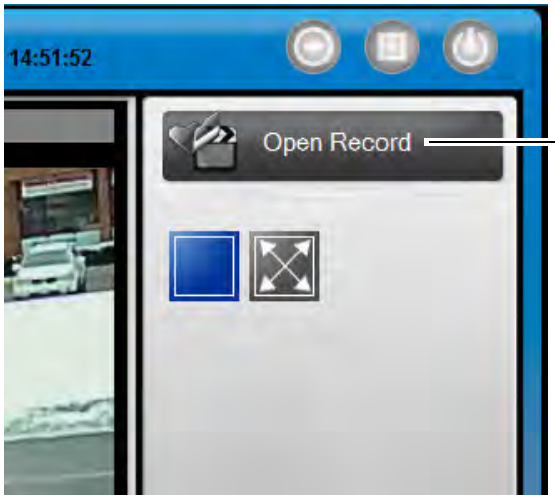
# 3.5 L-PLAY: PLAYING BACK VIDEO FROM YOUR PC'S HARD DRIVE

L-Play is used to playback video files saved to your computer's hard drive. L-Play is installed automatically when you install L-View.

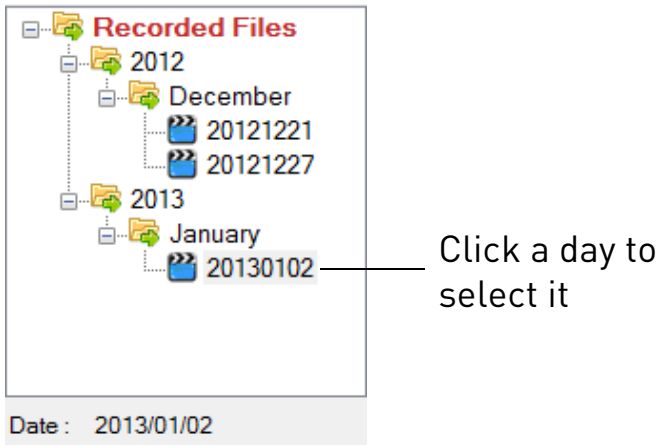


**To playback video saved to your computer's hard drive:**

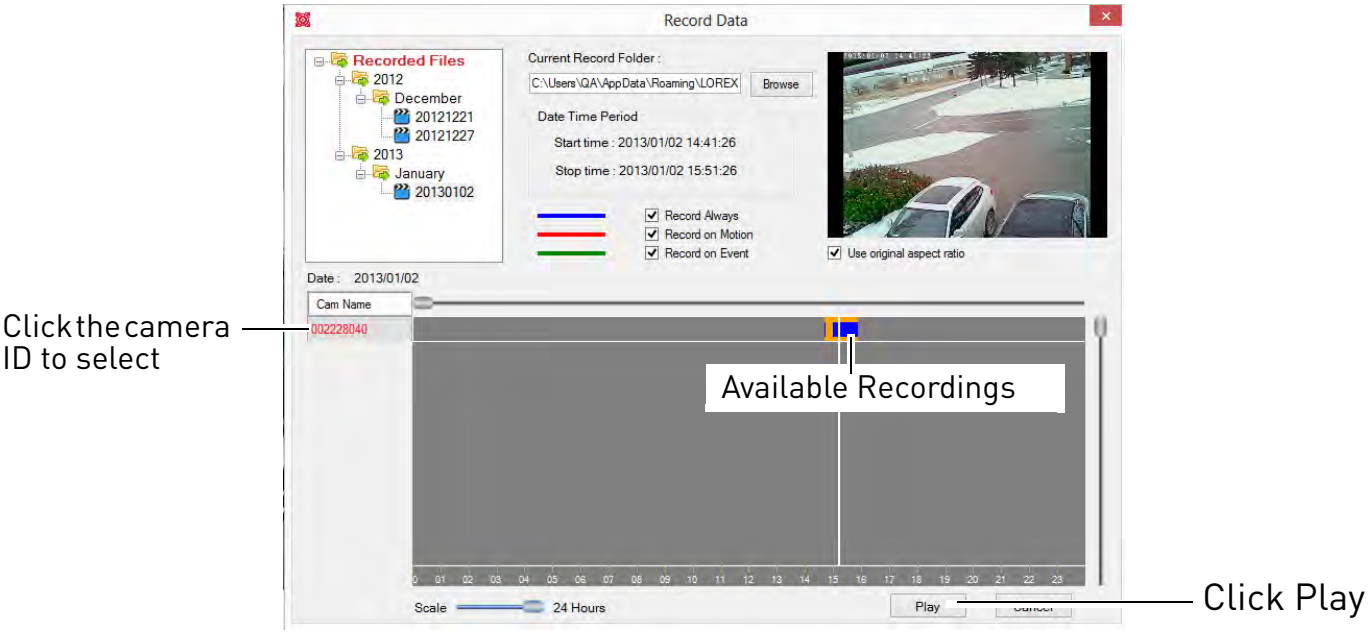
1. Record some video using the steps above if you have not done so already.
2. Click the L-Play icon ( ) to open L-Play.
3. Click **Open Record**.



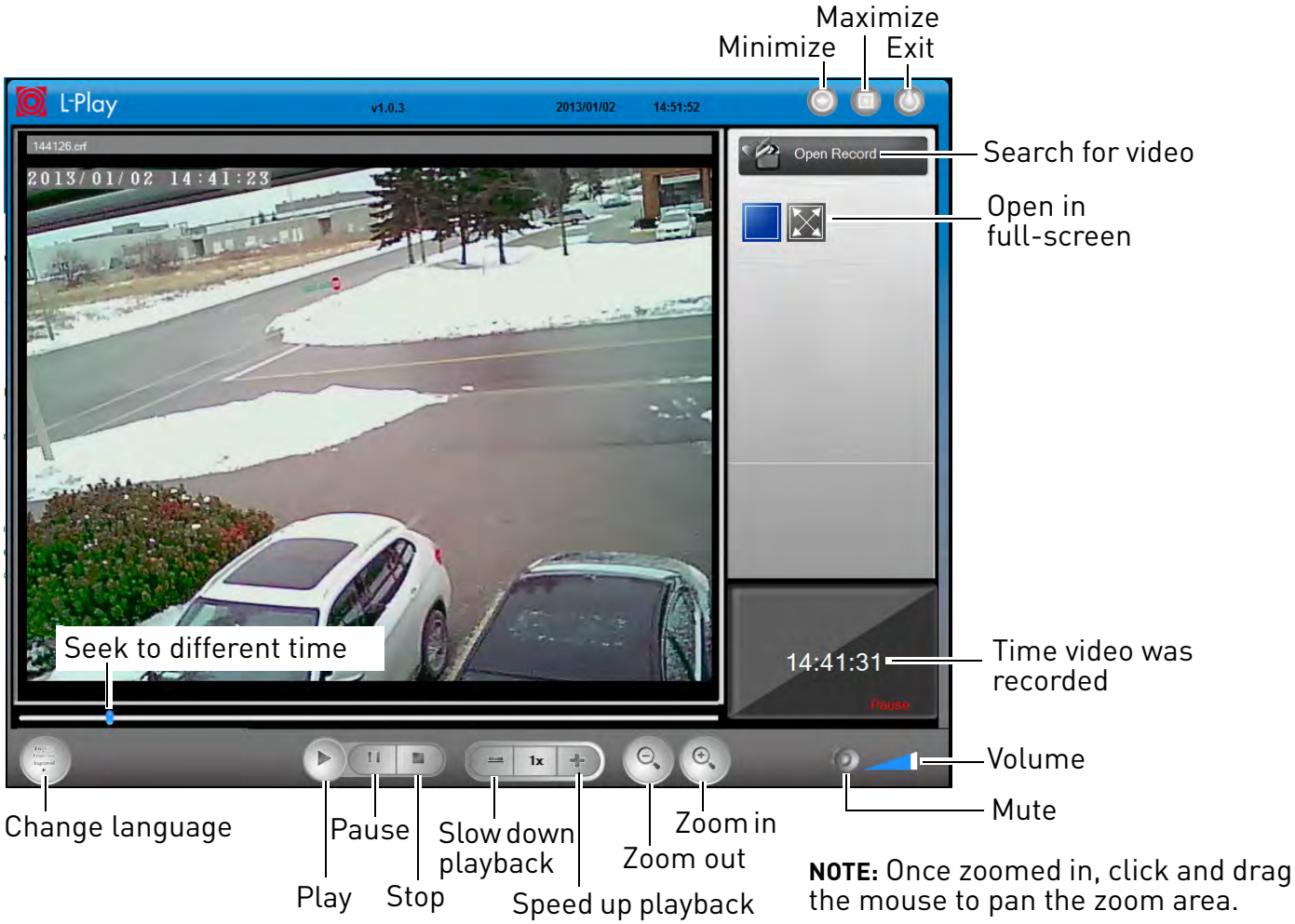

4. Use the Recorded Files area to find the day you would like to playback from.
   - Click **+** next to a year to expand recordings for the year.
   - Click **+** next to a month to expand recordings for that month.
   - Click a day to select it.



5. Click the ID of the camera you would like to playback video from and then click **Play**.




6. Use the on-screen controls to control playback.



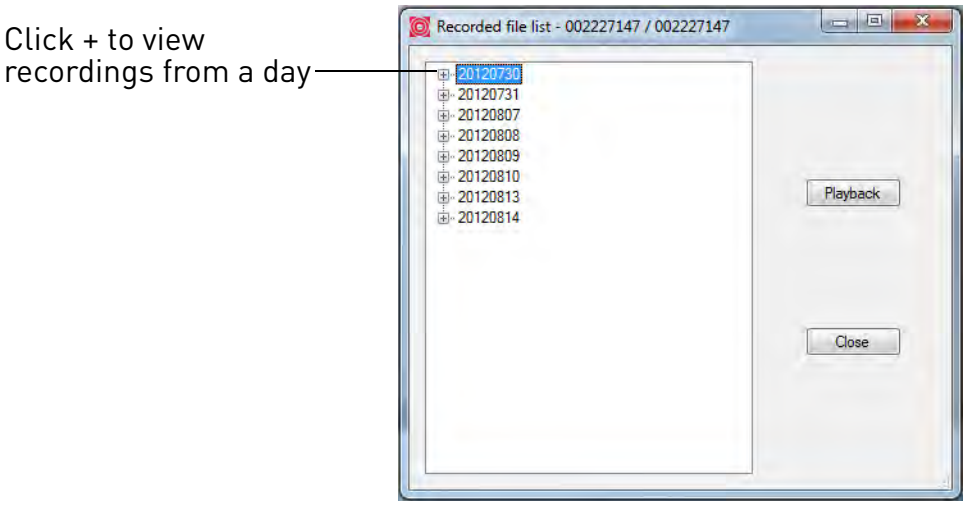
# 3.6 PLAYING BACK RECORDINGS ON THE MICROSD CARD WITH L-VIEW

You can use L-View to playback recorded video on the camera's microSD card (required; not included). For instructions on setting up recording on the microSD card, see "SD Card (Configuring microSD Recording)" on page 164.



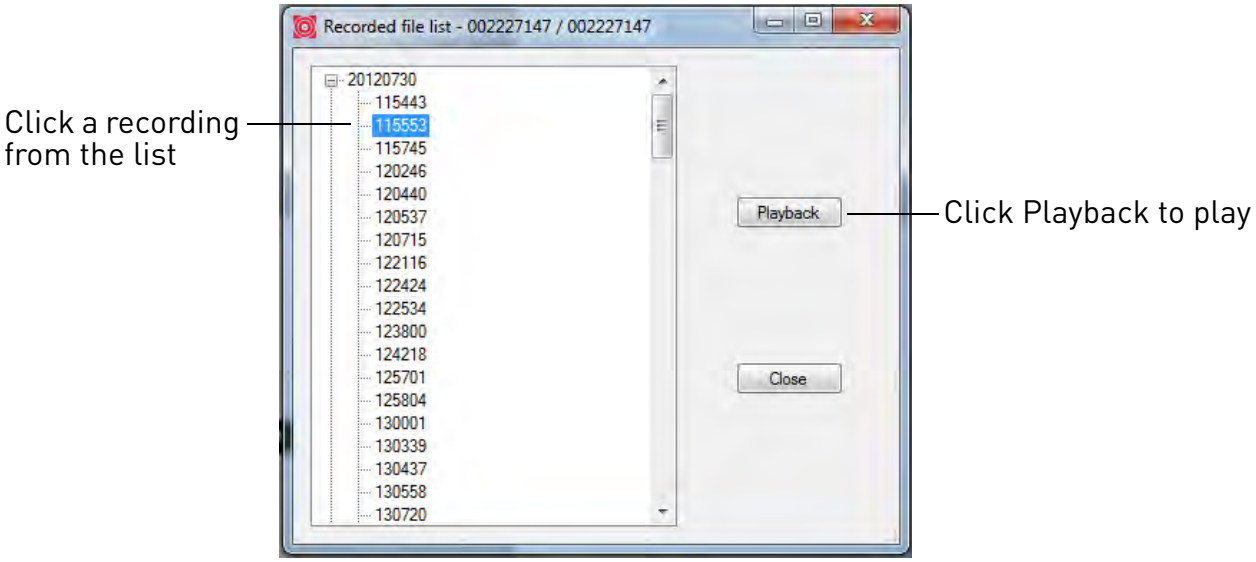
**To playback recorded video on the microSD card:**

1. Connect to the camera you would like to playback recordings from.
2. Click the **microSD button (** **)** on top of the camera display area. Enter the camera password if required.
3. A list is created of all days with recordings available in the format *yyyymmdd* (for example, *20120730* is *July 30, 2012*.




4. Click the **+** next to a day to view recordings from that day. Recordings from that day are shown from earliest to latest. Recordings are named according to the time they were recorded with the format *hhmmss* (for example, *115553* is *11:55:53 AM*).

5. Click a recording from the list and then click **Playback** to view it.




6. The recording plays back in the camera display area.
   - To return to a live view of your camera, wait for the recording to finish, then right-click and select **Play**.
   - **OR**, while the recording is still playing, right-click in the display area and select **Stop** then right-click again and select **Play**.

# 3.7 CONFIGURING CAMERA VIDEO SETTINGS

The Video Settings menu allows you to adjust the quality of the camera video.

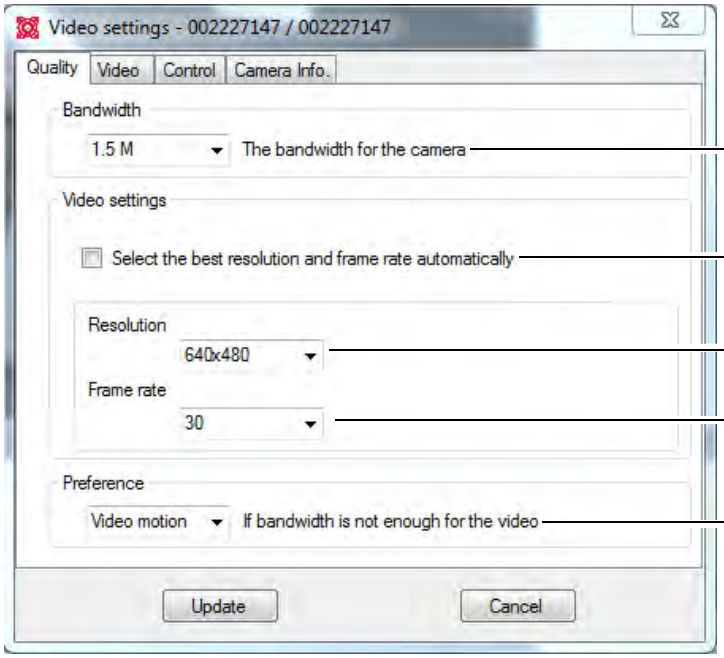
**To open the Video Settings menu:**

- Click  on the top of the display area for the camera you would like to configure.

**NOTE:** The camera will disconnect after making changes to video settings. Wait about 15 seconds after clicking Update and double-click the camera in Camera List or Auto Search to reconnect to the camera.

**TIP:** Change only one camera image quality setting at a time before clicking **Update** so you can judge the effects.

## *3.7.1 QUALITY TAB (CONFIGURING RESOLUTION, FRAME RATE, AND BANDWIDTH)*




The Quality tab allows you to configure image quality settings such as the camera resolution, frame rate, and bandwidth settings.

**To configure image quality settings:**

1. Under **Bandwidth**, select the upload speed of your Internet connection. If your Internet connection is faster than 1.5Mbps, select 1.5Mbps.
2. Check **Select the best resolution and frame rate automatically** to have the camera automatically adjust the resolution and frame rate based on bandwidth. Or, un-check it to manually configure the resolution and frame rate. If you are manually configuring the resolution and frame rate, configure the following:
   - **Resolution:** Manually select either **320x240** (QVGA), **640x480** (VGA), **1024x768**, or **1280x800** resolution. Higher resolution will give you a better, more detailed picture, but requires more bandwidth. Lower resolution allows the camera to maintain a higher frame rate when available bandwidth is low.
   - **Frame rate:** Manually select the frame rate between **30fps** (highest) and **1fps** (lowest). 30fps is real time video, meaning that movement in the image will appear smooth, with no choppiness.
3. Under **Preference**, select your quality preference when bandwidth increases or decreases:

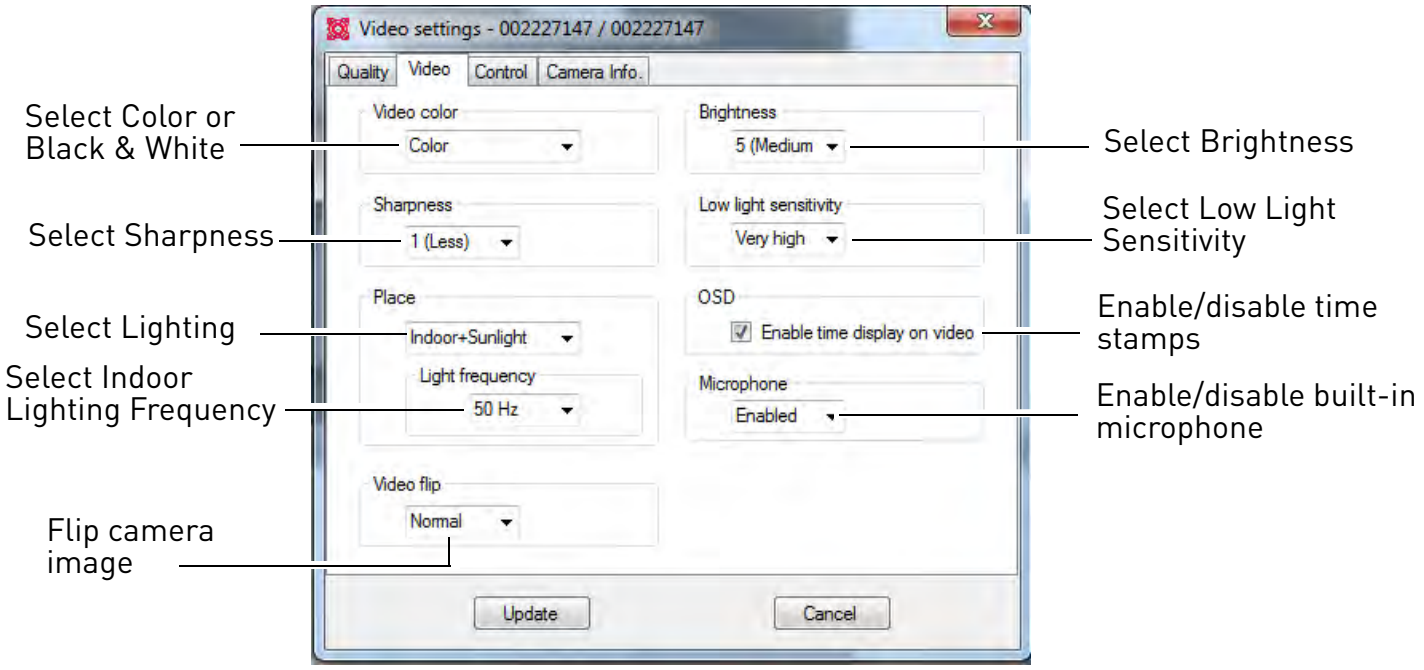
English

- Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient.
- Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient.
- Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient.
- Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.

4. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

## *3.7.2 VIDEO TAB (CONFIGURE GENERAL VIDEO SETTINGS)*

The Video tab allows you to configure general video settings, such as color and brightness settings.

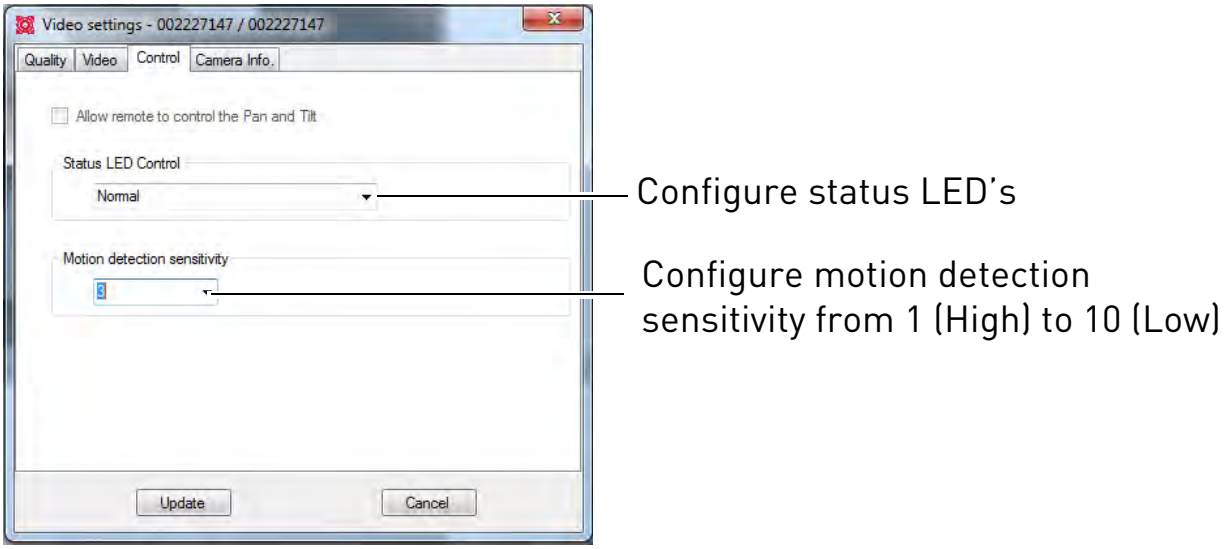



**To configure general video settings:**

1. Under **Video Color**, select **Color** or **Black & White**.
2. Under **Sharpness**, select the sharpness of the image between **10** (highest) and **1** (lowest).

3. Under **Place**, select **Outdoor video** if the area with the camera is brightly lit. Select **Indoor Video** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor video + Sunlight** if the picture is too bright on the Indoor Video setting.
   - If you select Indoor Video or Indoor Video + Sunlight, select **60Hz** or **50Hz** to adjust the camera for the frequency of your indoor lighting.
4. Under **Video Flip**, select **Video Flip** to flip the camera image vertically and horizontally or select **Normal** for normal orientation.
5. Under **Brightness**, select the brightness of the image between **10** (highest) and **1** (lowest).
6. Under **Low Light Sensitivity**, set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).
7. Check **Enable time display on video** to turn on video time stamps or un-check it to disable video time stamps.
8. Under **Microphone**, select **Enabled** to enable the built-in microphone on the camera or select **Disabled** to disable the built-in microphone on the camera.
9. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

## *3.7.3 CONTROL TAB (CONFIGURE STATUS LED'S AND MOTION DETECTION SENSITIVITY)*




The Control tab allows you to configure the camera status LED's to make the camera harder to spot at night. It also allows you to configure the motion detection sensitivity when using video motion detection.

**To configure the camera status LED's:**

1. Under **Status LED Control**, select one of the following:
   - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
   - **Always turn off:** LED's are turned off at all times.
   - **Turn off after connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
2. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

**To configure motion detection sensitivity:**

**NOTE:** The following method works when using video motion detection. It does not work when using PIR motion detection. For details on enabling motion detection and selecting video motion detection or PIR, see "Schedule" on page 161.

1. Under **Motion Detection Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will

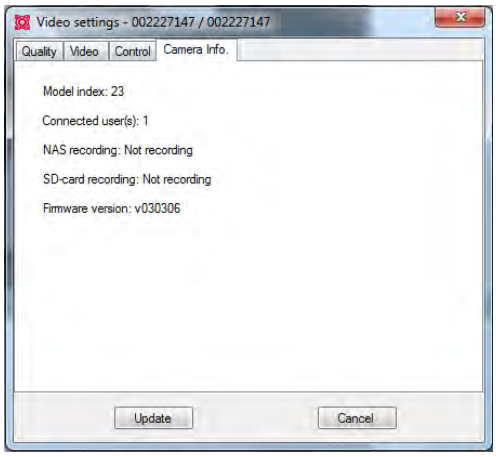
be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

2. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and Password (default: **left blank**) and click **OK**. The camera will disconnect. Wait about 15 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.



## *3.7.4 CAMERA INFO TAB*

The camera info tab shows system information about the camera.

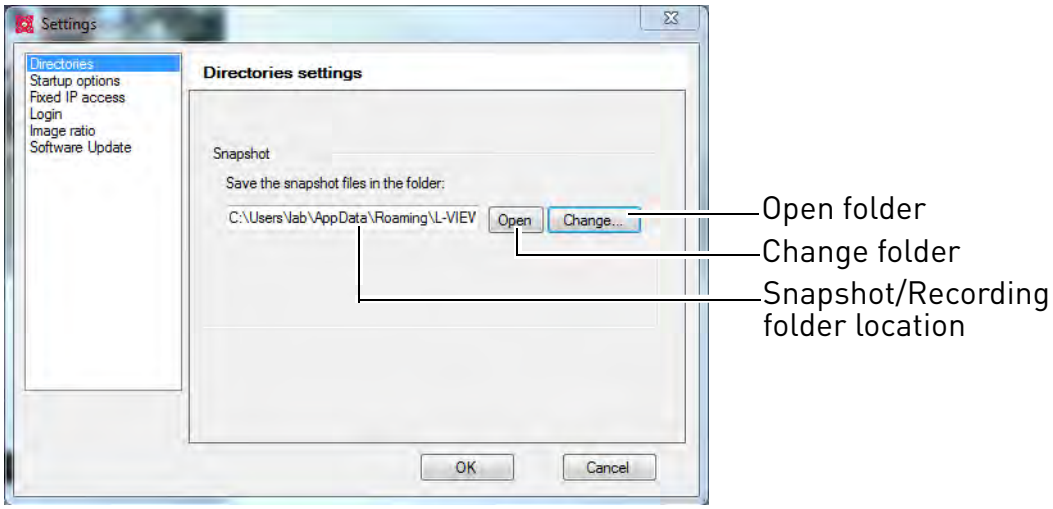


# 3.8 CONFIGURING L-VIEW

To configure settings for L-View, click the settings button ( ).

## *3.8.1 DIRECTORIES (OPENING OR CHANGING THE SNAPSHOT/ RECORDING FOLDER)*

The Directories menu shows you the folder where snapshots and video files are saved. It allows you to open or change the Snapshot/Recording folder.




**To open the Snapshot folder:**

- Click **Open**.

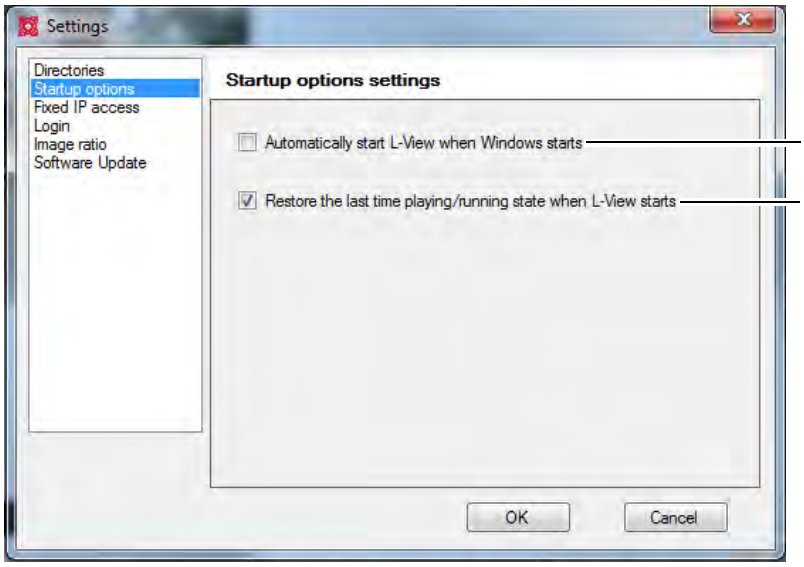
**To change the Snapshot folder:**

1. Click **Change**.
2. Select a new Snapshot folder and click **OK** to save changes.

## *3.8.2 STARTUP OPTIONS*

The Startup options menu allows you to configure startup options for L-View.

**To configure startup options:**




Check for L-View to open automatically when your computer turns on

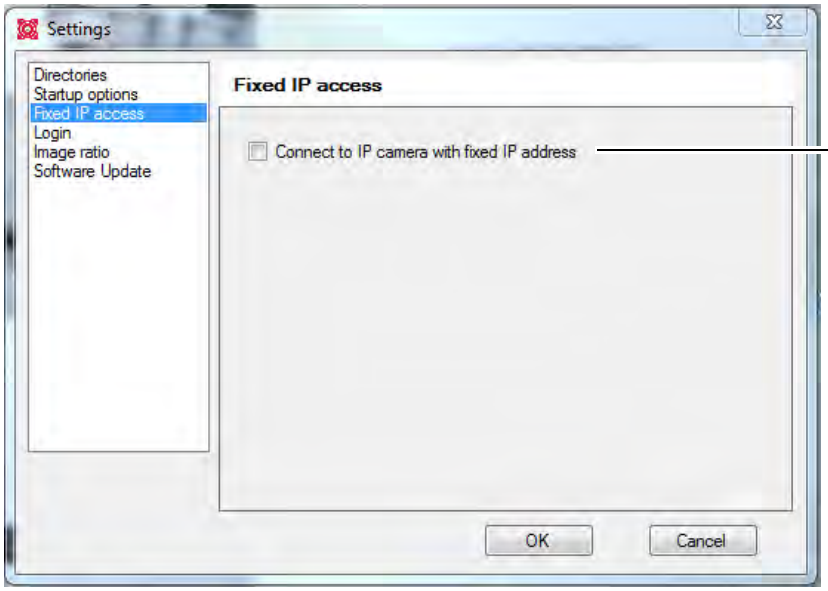
Check to restore camera layout and connect to previously open cameras when L-View opens

1. Check **Automatically start L-View when Windows starts** to have L-View open when your computer is turned on.
2. Check **Restore the last time playing/running state when L-View starts** to set L-View to restore the camera layout and connect to all the previously open cameras when L-View opens.
3. Click **OK** to save changes.

English

## *3.8.3 FIXED IP ACCESS*

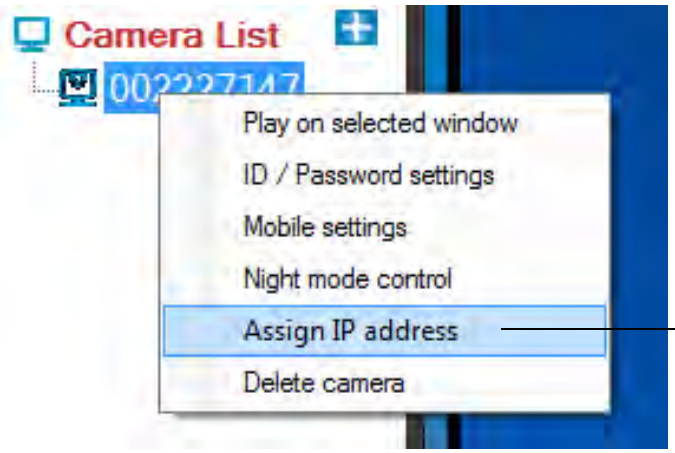
**The Fixed IP Access menu is for advanced users only.** It must be used if you have assigned your camera a fixed IP address on your router.




Check to enable Fixed IP addresses for cameras

**To configure your camera to use a fixed IP address:**

1. Check **Connect to the camera with a fixed IP address** to enable cameras to use fixed IP addresses.
2. Click **OK** to save changes.
3. In the camera list, right-click the camera you would like to configure and select **Assign IP Address**.

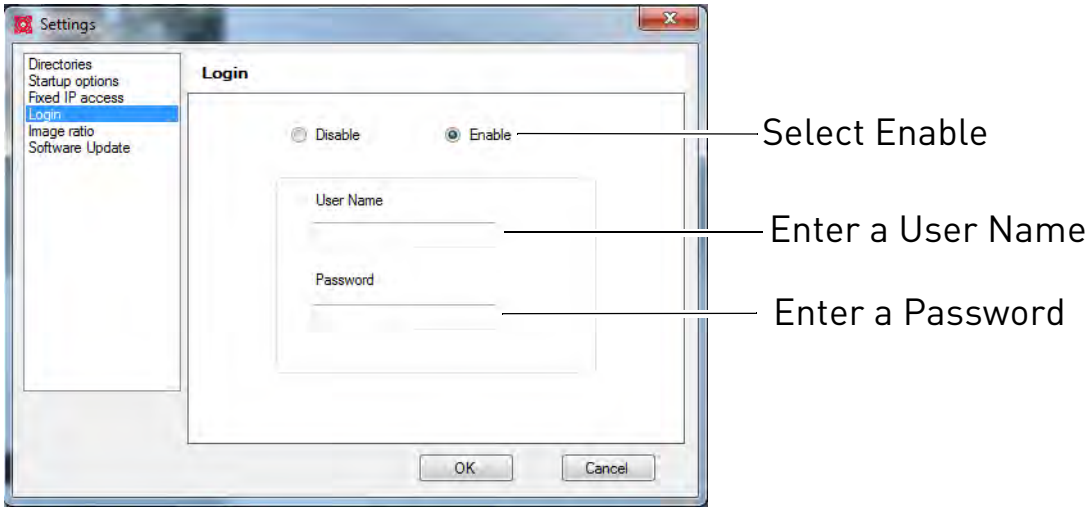



Assign IP address

4. Enter the camera's internal IP address and click **OK**.

## 3.8.4 LOGIN (ENABLING A PASSWORD TO ACCESS L-VIEW)

The Login menu allows you to enable a password to open L-View.

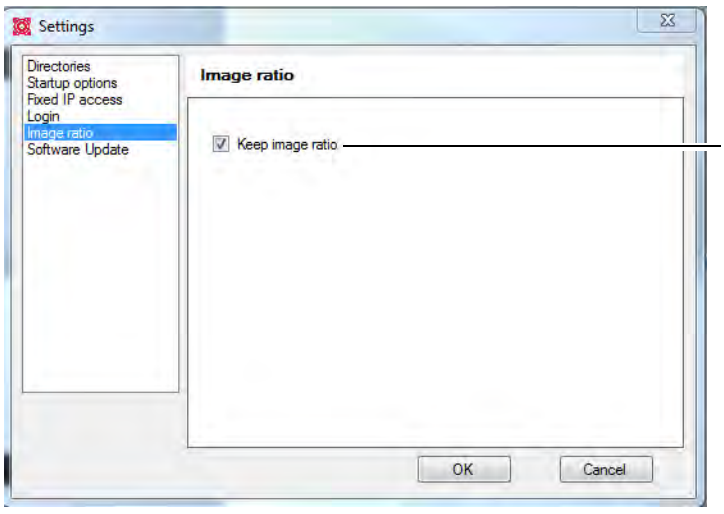



**To enable a password for L-View:**

1. Select **Enable**.
2. Under **User Name** and **Password**, enter the desired user name and password that must be used when you open L-View.
3. Click **OK** to save changes. The next time you exit L-View and re-open it, it will ask you for a password to log in.

## 3.8.5 IMAGE RATIO

The Image Ratio menu allows you to configure L-View to preserve the original aspect ratio of the video, or to allow the video to stretch to fill the display area.

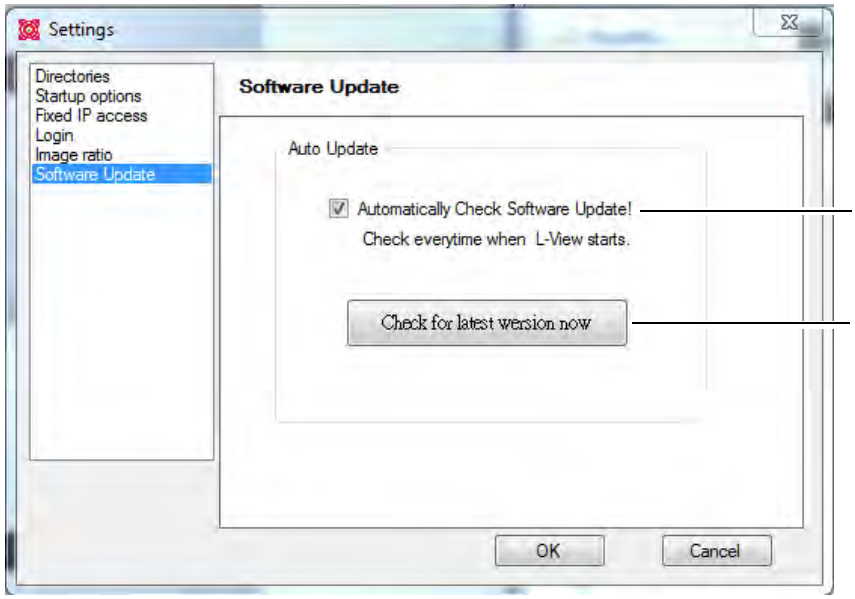


**To configure Image Ratio:**

1. Check **Keep Image Ratio** to not allow any stretching of the image (bars may appear on the sides of the image). Un-check **Keep Image Ratio** to stretch the image to the entire size of the display.
2. Click **OK** to save changes.

## *3.8.6 SOFTWARE UPDATE*

The Software Update menu allows you to enable automatic updates of L-View or the camera firmware. It also allows you to manually check for updates.




**To enable automatic upgrades:**

1. Check **Automatically Check Software Update**.
2. Click **OK**. L-View will check online for an software updates when it opens. If an update is available, follow the on-screen instructions to install the update.
   - It will also check for camera updates when a new firmware is available. If a new camera firmware is available, click **OK** and enter the admin user name (default: **admin**) and password (default: **left blank**). Then, wait for the upgrade to complete. **Do not unplug the camera power cable or Ethernet cable during firmware updates**. The camera will reboot during the firmware upgrade process.

**To manually check for an update:**

1. Click **Check for latest version now**. If an update is available, follow the on-screen instructions to install the update.

# 4. L-VIEW FOR MAC

L-View for Mac allows you to view your camera on a Mac computer. L-View for Mac is available as a free download from www.lorextechnology.com.

For instructions on connecting to your camera using Mac, see "Connecting to your Camera on Mac" on page 34.



## 4.1 SYSTEM REQUIREMENTS

| Description | Minimum System Requirements |
|---|---|
| CPU | 2.0 GHz (dual-core recommended) |
| Memory | 2GB |
| Operating System | OS X 10.6.8 Snow Leopard (Intel Processors only) |
| Hard Drive | Minimum 5~10 GB free for recordings |

## 4.2 L-VIEW FOR MAC INTERFACE

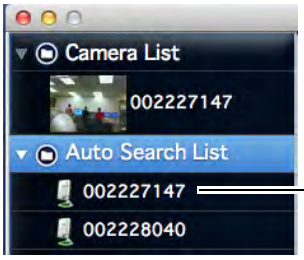
1. **Window Controls:** Click to exit or minimize L-View.
2. **Camera List:** Shows cameras that have been saved in L-View. Double-click cameras to connect to them.

**NOTE:** To connect to multiple cameras, click to select a display area. The selected area is highlighted. Then, double-click the camera to open it in the selected area.

Then, double-click a camera to open it


Click to select a display area

3. **Auto Search List:** Auto Search shows cameras located on your local network (LAN).
   - Double-click the camera ID to view the camera.
   - Drag the camera to the Camera List to save the camera.
   - Right-click the camera ID and select Web configure to configure the camera settings using a browser. See "Configuring Camera Settings using a Web Browser" on page 152.




Right-click the camera ID and select Web configure to open the Web Configuration tool

4. **Playback:** Click to open Playback mode. For details, see "Playing Back Video from your Mac's Hard Drive" on page 71.
5. **All Camera Action:** Click to perform an action on all cameras.
6. **Recording Controls:**
   - **Record:** Click to start/stop manual recording. For details, see "Recording Video to your Mac's Hard Drive" on page 70.
   - **Snapshot:** Click to take a snapshot from the camera. To view snapshots, click and select Snapshot folder.

- **Folder:** Click to open the recording folder or snapshot folder for this camera.


Click to open recording or snapshot folder

7. **Display Area:** Shows video from your camera.
   - Double-click to view the camera in full-screen; double-click again to exit full-screen.
   - Right-click and click Stop to close the selected camera.
   - Click a display area to select it. The top of the area turns orange. L-View plays audio from the camera in the currently selected area.
8. **Split-screen Controls:**
   - **:** Click to open single camera view.
   - **:** Click to open 4-camera view.
   - **:** Click to open 6-camera view.
   - **:** Click to open the current display in full-screen. Press **ESC** to exit full-screen.

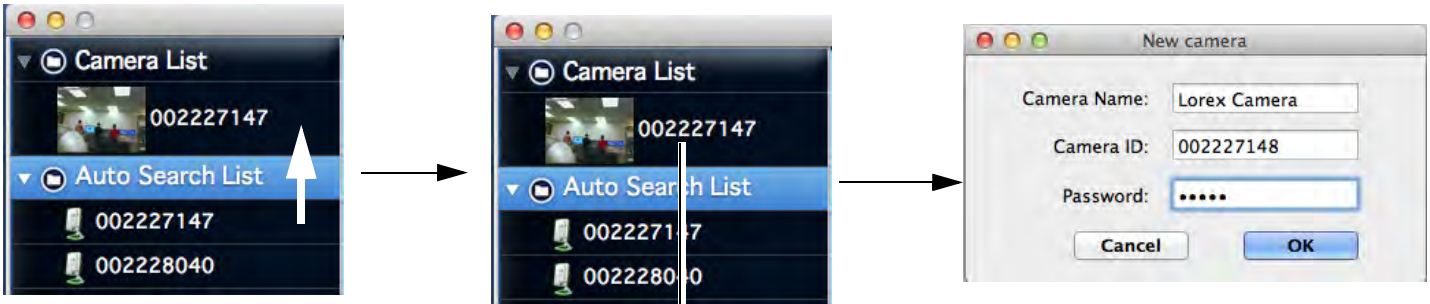
# 4.3 CAMERA LIST (MANAGING CAMERAS)

The Camera List is used to save connection information for your cameras, so you don't have to re-enter the ID or password each time you connect. It also allows you to configure certain camera settings (see "Using Camera List to Modify Camera Settings" on page 74).

## *4.3.1 ADDING CAMERAS TO CAMERA LIST*

- If the camera is on the same network as the computer, click and drag the ID from the Auto Search List to the camera list. Then right-click the ID and click **ID/Password**

**setting**. Enter the camera password. If you want, you can also enter a Camera Name of your choice for your camera. Click **OK**.




Click and drag camera ID from Auto Search List to Camera List

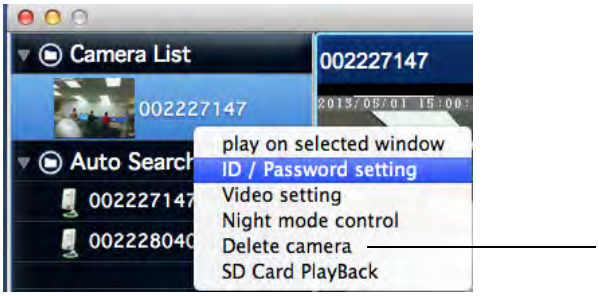
Right-click and select ID/Password setting

Enter a name of your choice. Enter the camera password and click OK

- If you are adding a camera over the Internet, see "Connecting to your Camera over the Internet (Mac)" on page 38.

### *4.3.2 DELETING CAMERAS FROM CAMERA LIST*

- Right-click the camera in Camera List and select **Delete Camera**. Click **OK** to confirm.




Right-click the camera and select Delete Camera

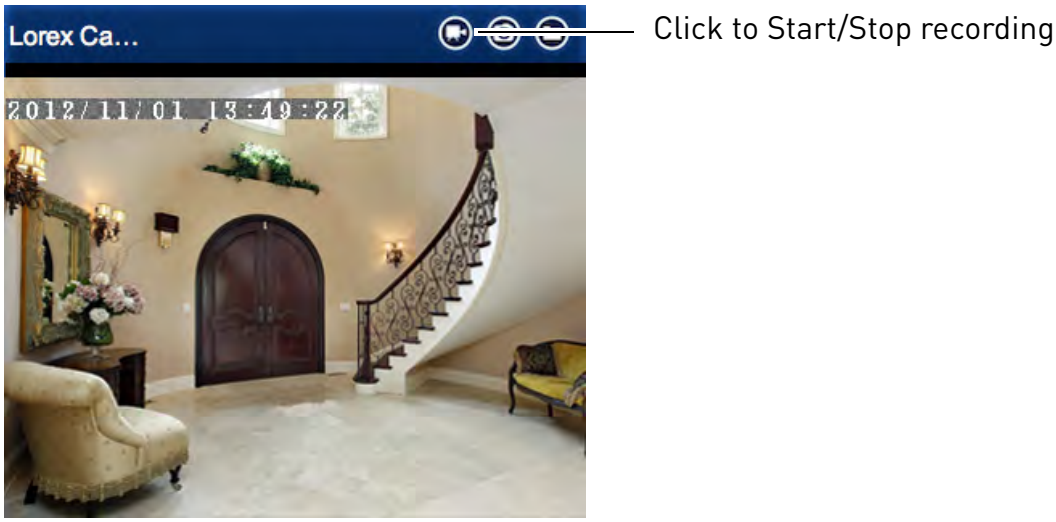
## 4.4 RECORDING VIDEO TO YOUR MAC'S HARD DRIVE

You can manually record video to your computer's hard drive.

**To record video to your Mac's hard drive:**

1. Press the recording button ( ) to start recording. The recording button will turn green during recording.

2. Press the recording button again ( ) to stop recording.



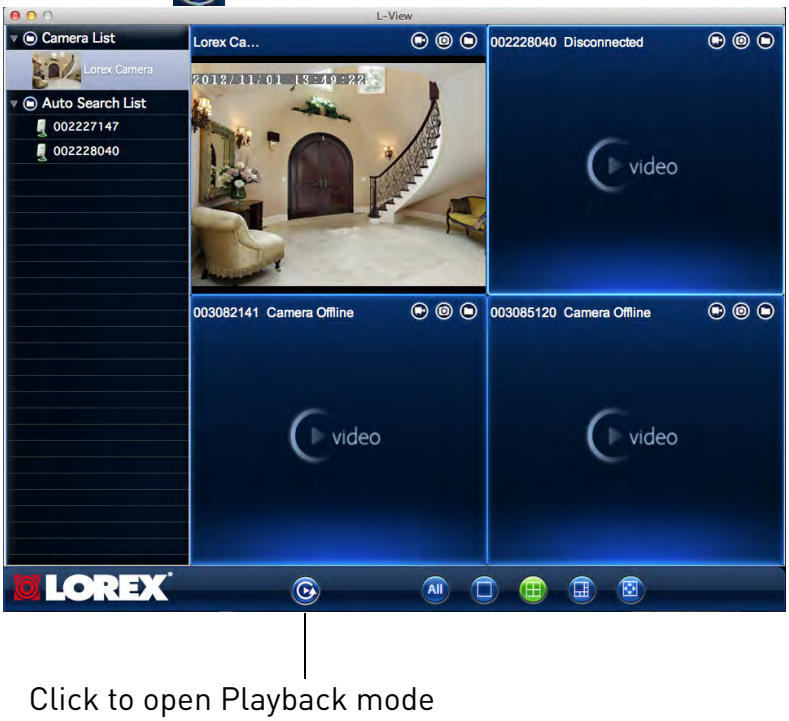

English

## *4.4.1 PLAYING BACK VIDEO FROM YOUR MAC'S HARD DRIVE*

You can playback video files you have saved to your Mac's hard drive in L-View.

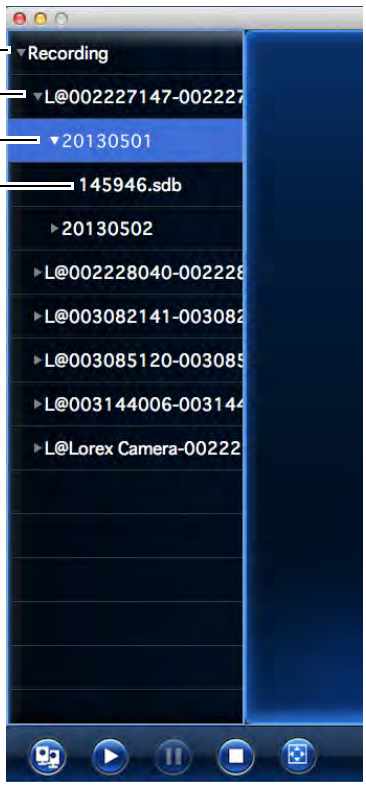
**To play back video from your Mac's hard drive:**

1. Use the instructions above to record some video if you have not done so already.
2. Click the Playback button ( ).



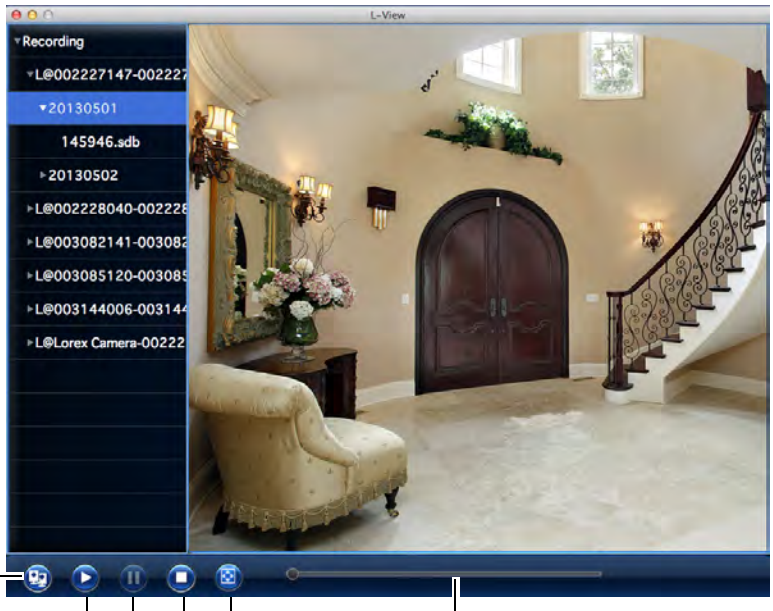
3. Select the video file you would like to playback.

Click the arrow next to Recording to expand the recording list
Click the arrows next to the camera you would like to playback from
Click the arrows next to the date you would like to playback video from
Double-click to open video files




**NOTE:** Dates are shown using *yyyymmdd* format (e.g. *20121016* is *October 16, 2012*). Video timestamps are shown using *hhmmss* format (e.g. *103045* is *10:30:45am*).

4. Use the on-screen playback controls.



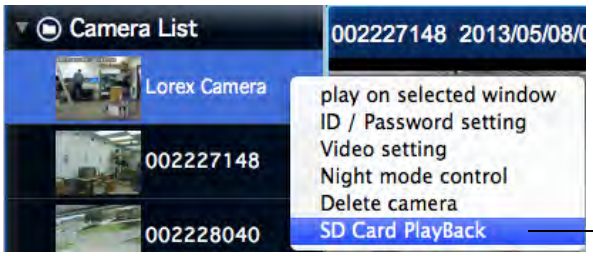
# 4.5 PLAYING BACK RECORDINGS ON THE MICROSD CARD WITH L-VIEW

You can use L-View to play back recordings on the camera's microSD card (not included). to set up microSD recording, you must use the camera's web configuration tool. For details, see "SD Card (Configuring microSD Recording)" on page 164.



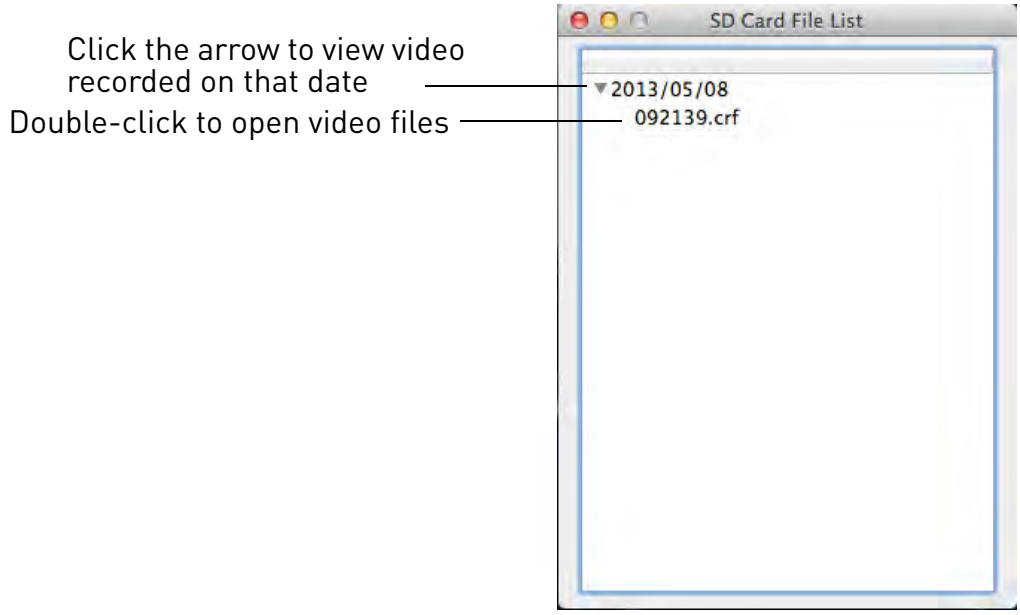
**To play back recordings on the camera's microSD card:**

1. Right-click on the camera in Camera List and select **SD Card Playback**.




Right-click the camera and select SD Card Playback

2. Enter the password for the camera and click **OK**. L-View searches for recordings on the microSD card.
3. Select the file you would like to play back.




**NOTE:** Video timestamps are shown using *hhmmss* format (e.g. *103045* is *10:30:45am*).

4. To return to live video, close the microSD window and double-click the camera in Camera List.

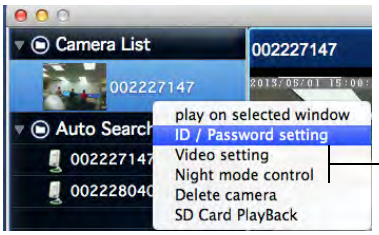
# 4.6 USING CAMERA LIST TO MODIFY CAMERA SETTINGS

You can use L-View to configure certain settings for the camera.

**TIP:** Change only one camera setting at a time before clicking Update so you can judge the effects.

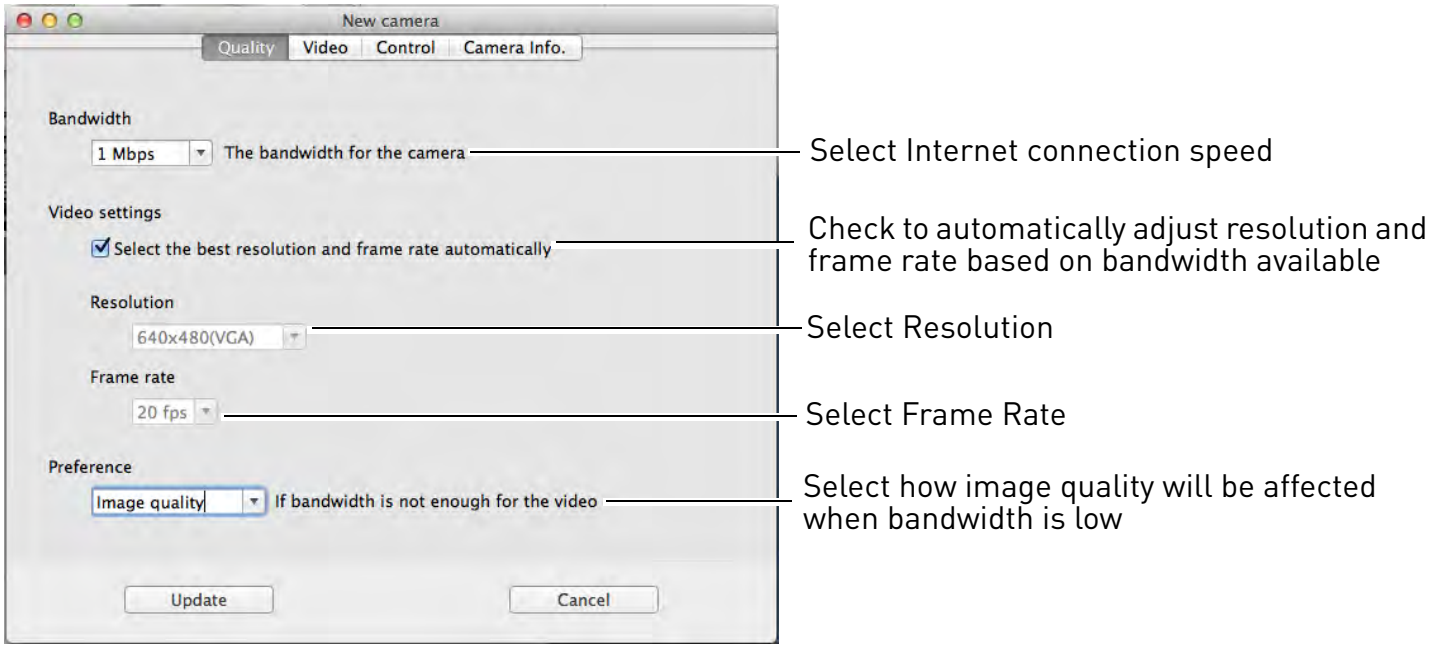
**To configure camera settings using Camera List:**

- Right-click on the camera in Camera List and select **Video settings** or **Night mode control**. See below for details.




## *4.6.1 QUALITY TAB (CONFIGURE BANDWIDTH, RESOLUTION, AND FRAME RATE)*

The Quality tab allows you to configure image quality settings such as the camera resolution, frame rate, and bandwidth settings.



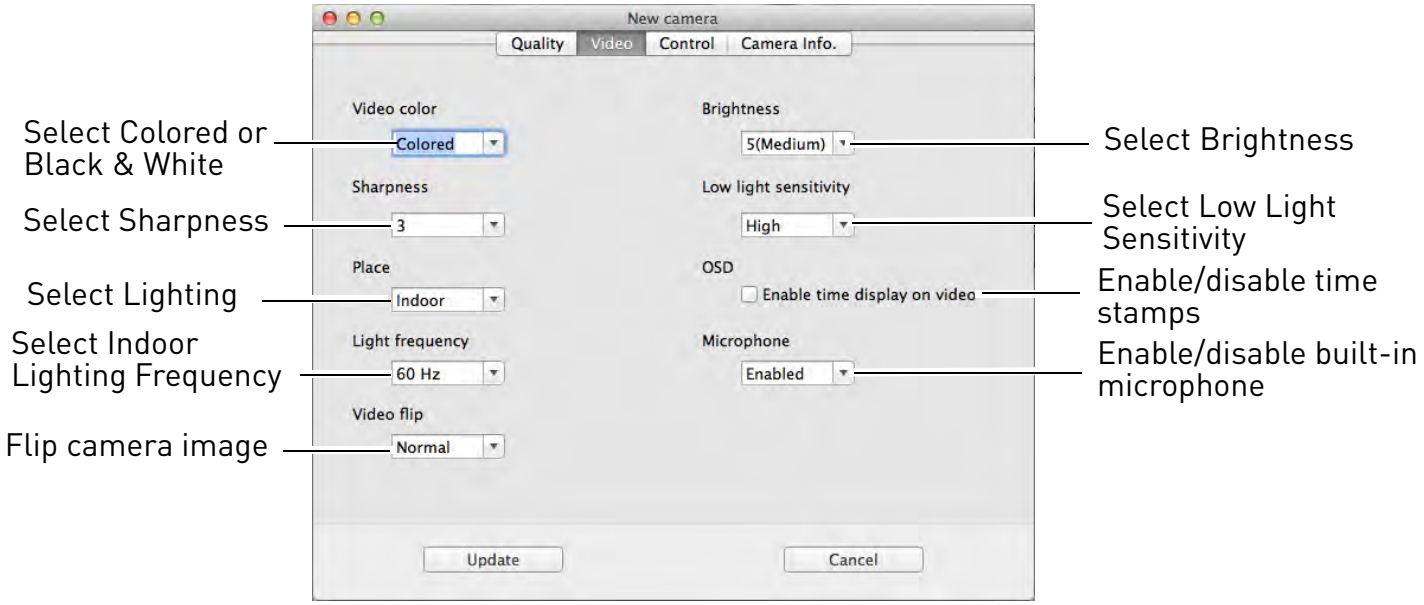
**To configure image quality settings:**

1. Right-click on the camera in Camera List and select **Video settings**. Select the **Quality** tab.
2. Under **Bandwidth**, select the speed of your Internet connection. If your Internet connection is faster than 3Mbps, select 3Mbps.
3. Check **Select the best resolution and frame rate automatically** to have the camera automatically adjust the resolution and frame rate based on bandwidth. Or, un-check it to manually configure the resolution and frame rate. If you are manually configuring the resolution and frame rate, configure the following:
   - **Resolution:** Manually select either **(640x480) VGA**, **(320x240) QVGA**, **1024x768**, or **1280x800** resolution. Higher resolution settings will give you a better, more detailed picture, but requires more bandwidth. QVGA allows the camera to maintain a higher frame rate when available bandwidth is low.
   - **Frame rate:** Manually select the frame rate between **30fps** (highest) and **1fps** (lowest). 30fps is real time video, meaning that movement in the image will appear smooth, with no choppiness.
4. Under **Preference**, select your quality preference when bandwidth increases or decreases:
   - Select **Video motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient.
   - Select **Image quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient.
   - Select **Better quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient.
   - Select **Best quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.
5. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to close the settings window.

**NOTE:** The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

## *4.6.2 VIDEO TAB (CONFIGURE GENERAL VIDEO SETTINGS)*

The Video tab allows you to configure general video settings, such as color and brightness settings.



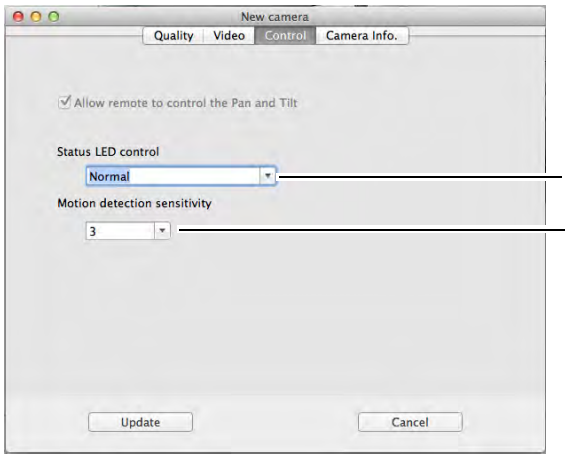

**To configure general video settings:**

1. Right-click the camera in Camera List and click **Video settings**. Then, select the **Video** tab.
2. Under **Video Color**, select **Colored** or **Black & White**.
3. Under **Sharpness**, select the sharpness of the image between **10** (highest) and **1** (lowest).
4. Under **Place**, select **Outdoor** if the area with the camera is brightly lit. Select **Indoor** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor + Sunlight** if the picture is too bright on the Indoor setting.
   - If you select Indoor or Indoor + Sunlight, select **60Hz** or **50Hz** under **Light Frequency** to adjust the camera for the frequency of your indoor lighting.
5. Under **Video Flip**, select **Flip** to flip the camera image vertically and horizontally or select **Normal** for normal orientation.
6. Under **Brightness**, select the brightness of the image between **10** (highest) and **1** (lowest).
7. Under **Low Light Sensitivity**, set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).

8. Check **Enable time display on video** to turn on video time stamps or un-check it to disable video time stamps.
9. Under **Microphone**, select **Enabled** to enable the built-in microphone on the camera or select **Disabled** to disable the built-in microphone on the camera.
10. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to exit the settings window.

**NOTE:** The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

## *4.6.3 CONTROL TAB (CONFIGURE STATUS LED'S AND MOTION DETECTION SENSITIVITY)*




The Control tab allows you to configure the camera status LED's to make the camera harder to spot at night. It also allows you to configure the motion detection sensitivity when using video motion detection.

**To configure the camera status LED's:**

1. Right-click the camera in Camera List and click **Video settings**. Then, select the **Control** tab.
2. Under **Status LED Control**, select one of the following:
   - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
   - **Always turn off:** LED's are turned off at all times.
   - **Turn off after connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
3. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to exit the settings window.

**NOTE:** The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

**To configure motion detection sensitivity:**

**NOTE:** The following method works when using video motion detection. It does not work when using PIR motion detection. For details on enabling motion detection and selecting video motion detection or PIR, see "Schedule" on page 161.

1. Right-click the camera in Camera List and click **Video settings**. Then, select the **Control** tab.

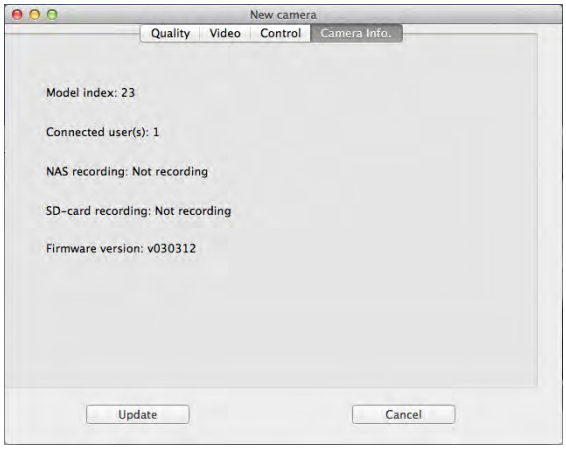
2. Under **Motion Detection Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.
3. Click **Update** to save changes. Enter the camera admin user name (default: **admin**) and password (default: **left blank**) and click **OK**. Click **OK** to exit the settings window.

**NOTE:** The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.



## *4.6.4 CAMERA INFO TAB*

The camera info tab shows system information about the camera.

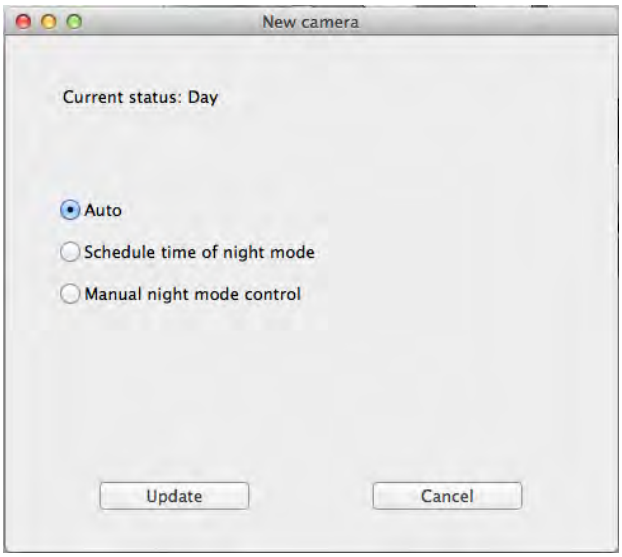



**To access the camera info tab:**

- Right-click on the camera in Camera List and select **Video Settings**. Then select the **Camera Info** tab.

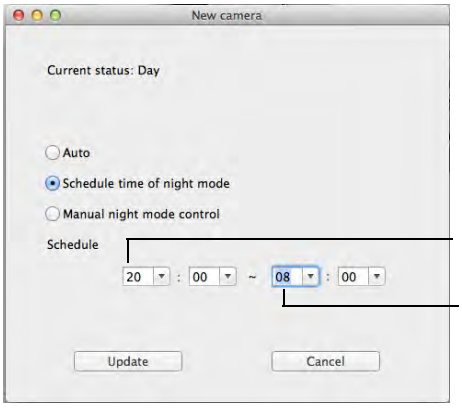
## *4.6.5 CONFIGURING NIGHT MODE SETTINGS*

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.




**To configure night mode settings:**

1. Right-click on the camera you want to configure in Camera List and select **Night mode control**.
2. Select one of the following:
   - **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
   - **Scheduled time of night mode:** Camera will switch between day mode and night mode at a scheduled time each day. If using this option, use the first set of drop-down menus to select (in 24-hour time) the time the camera will switch to night mode and the second set of drop-down menus to select when the camera will return to day mode.

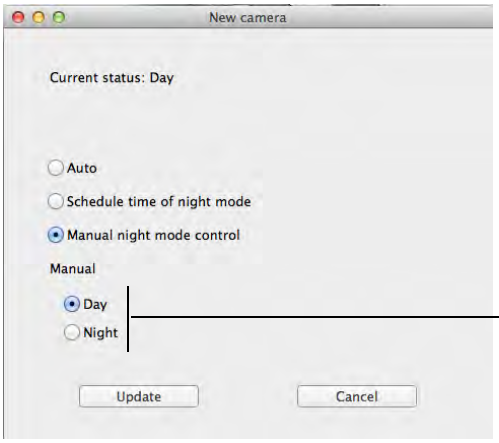



*EXAMPLE*

Start of night mode (8:00 PM)

Return to day mode (8:00 AM)

- **Manual night mode control:** Manually select day mode or night mode. If using this option, under **Mode**, select **Day** for day mode or **Night** for night mode.




3. Click **Update** to apply changes to your camera. Enter the admin user name (default: **admin**) and password (default: **left blank**) for the camera and click **OK**. Click **OK** to exit the settings window.

**NOTE:** The camera may reboot after settings are changed. Wait about 30 seconds and then double-click the camera in Camera List or Auto Search to reconnect to the camera.

# 5. IPHONE® APP

The app for iPhone® is called **Lorex Ping**.

For instructions on connecting to your camera using an iPhone®, see "L-View 104 for PC" on page 42.

## 5.1 LIVE VIEWING WITH LOREX PING FOR IPHONE®

You can use Lorex Ping in portrait or landscape mode. Tilt the phone to switch between portrait or landscape.


Disconnect button (only shown in portrait mode)

Save a snapshot of the camera on your phone

Play a siren on the camera

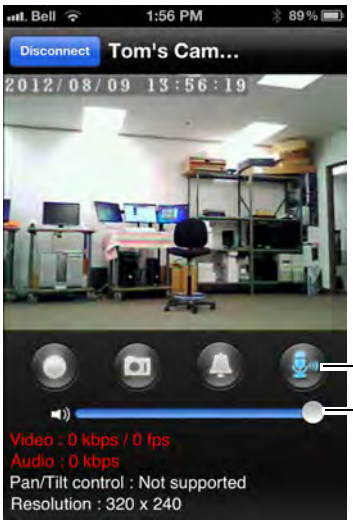
Record video to phone memory; press again to stop recording

Activate 2-way-audio (intercom) using the phone microphone (speaker required; not included)

Video information

## 5.1.1 USING 2-WAY-AUDIO (INTERCOM)

1. While viewing, touch  to activate 2-way-audio (intercom) using the phone microphone.
   - A volume slider appears that allows you to adjust the speaker volume.
   - Touch  again to turn off 2-way audio.




## 5.1.2 TAKING SNAPSHOTS

- While viewing, tap  to take a snapshot from the camera. You can view snapshots using the Camera app or save photos to your computer by connecting your iPhone® to your computer using a USB cable.

## 5.1.3 RECORDING VIDEO TO IPHONE®

You can manually record video from your camera directly to your iPhone's built in memory.

**To record video to your iPhone's memory:**

1. While viewing, tap  to start recording.
2. Tap  again to stop recording. To view the recorded video, see below.

# 5.2 PLAYING BACK VIDEO RECORDED ON IPHONE®

After using the record button to record video to your iPhone®, you can playback video on iPhone®.

## *5.2.1 USING PLAYBACK*

1. From the Camera List, tap Playback ( 

).

**NOTE:** If you are still connected to the camera, tap **Disconnect** to return to the Camera List. Disconnect only appears when holding the phone in portrait mode.

2. Tap the name of the camera you would like to select.


Tap the camera you would like to playback video from

3. Tap the date of the video recording you would like to playback. Then tap the desired video file to start playback.
4. Use the on-screen video controls to control playback. Tap **Stop** to return to the file list.

# 5.3 PLAYING BACK VIDEO RECORDED ON MICROSD ON IPHONE®

You can playback video recorded on the camera microSD card (not included) on your iPhone®. For details on setting up microSD recording, see “Configuring microSD Recording” on page 100.

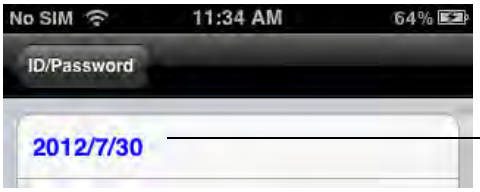
**To play back video recorded on the camera microSD card:**

1. From the Camera List, tap  to open the camera settings page.

2. Scroll down and tap **SD card playback**.
3. Select the camera you would like to playback from.


Select camera for microSD playback

4. The camera scans for recorded video files and shows a list of days with recorded video. Tap a day to view recordings created on that day.

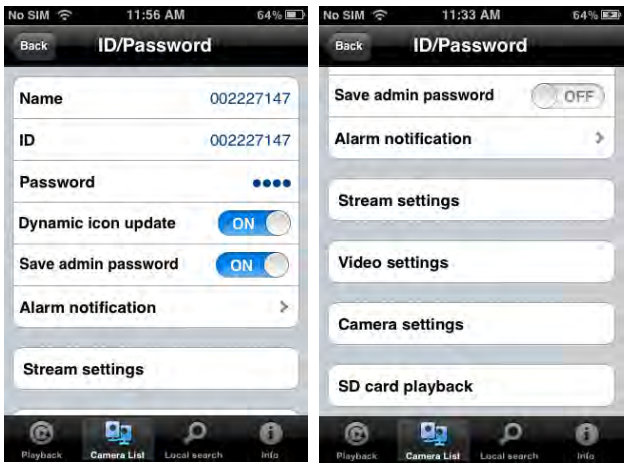



Tap a day to view recorded videos from that day.

5. Tap a recording to play it.
6. Tap **Disconnect** to return to the recordings list.

# 5.4 USING CAMERA LIST TO EDIT CAMERA SETTINGS

You can use the Camera List to adjust the connections settings or other settings for your camera.




**To access Camera Settings:**

1. Tap Camera List 

. Then tap  next to the camera you would like to edit.



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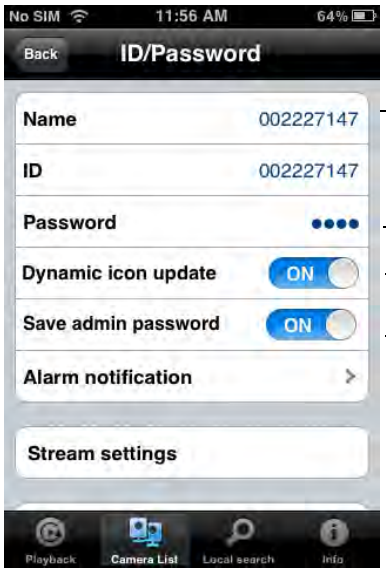
2. For certain menus, you will need to enter the camera admin user name and password before you may change settings. By default, the admin user name is **admin** and the password is **left blank**.

## *5.4.1 EDITING CAMERA CONNECTION SETTINGS*

You can edit your camera connection information. This is useful if you change the password of the camera or if you want to save the admin user name and password, so you don't have to enter it to make settings changes.

**To edit camera connection settings:**

1. In Camera List, tap  next to the camera you would like to edit.




— Edit Camera Name

— Edit Password

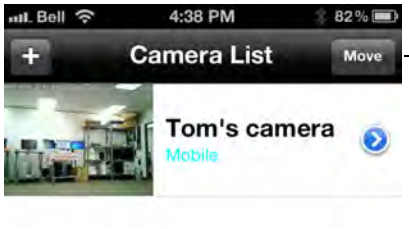
— Enable/disable automatic icon updates

— Enable/disable saving admin user name and password next time entered

2. Change the **Name** and **Password** as needed.
3. Under **Dynamic icon update**, select **ON** to have the camera icon automatically update every time you connect to the camera, or select **OFF** to keep the icon as is.
4. Under **Save admin password**, select **ON** to have Lorex Ping save the admin user name and password the next time you enter it, or **OFF** to require the admin user name and password whenever settings changes are made.
5. Tap **Back** to save changes and return to camera list.

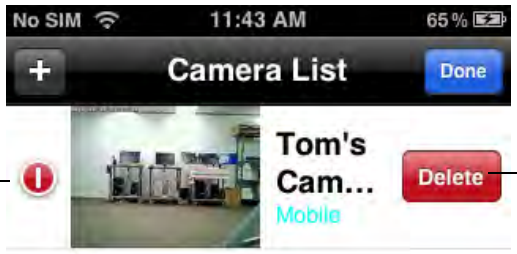
## 5.4.2 DELETING CAMERAS FROM CAMERA LIST

1. In Camera List, tap **Move**.




Tap Move

2. Tap ⊖ next to the camera you would like to delete then tap **Delete** to confirm.



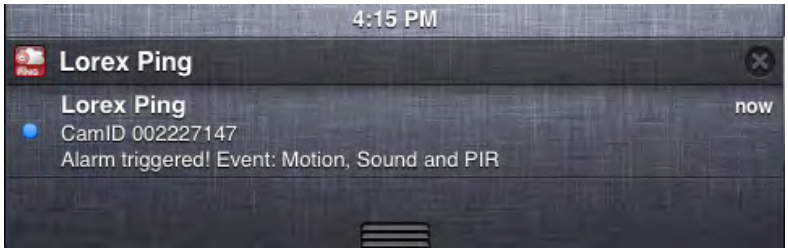

Tap here

Then tap Delete

3. Tap **Done**.

## 5.4.3 EDITING MOTION/SOUND NOTIFICATION SETTINGS (PUSH NOTIFICATIONS)

Push Notifications can be set up to create a notification straight to your iPhone® when motion or sound is detected by the camera. Push Alarm Notifications go directly to the notifications area on your device.

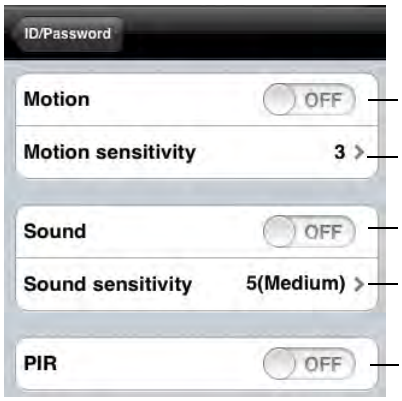



Example of Push Notification

**To configure motion/sound push notifications:**

1. In Camera List, tap ⊙ next to the camera.

2. Tap **Alarm notification**.




Enable/disable push notifications for video motion detection

Select sensitivity for video motion push notifications

Enable/disable push notifications for sound

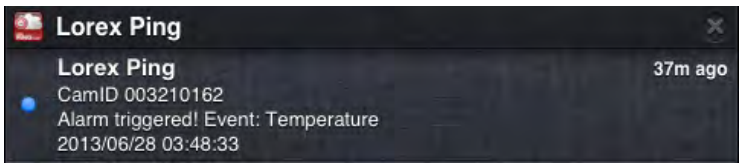
Select sensitivity for sound push notifications

Enable/disable push notifications for PIR motion detection

3. Under **Motion**, select **ON** to enable Push Alarm Notifications when motion is detected using video motion detection or **OFF** to disable.
4. Under **Motion Sensitivity**, select the sensitivity for video motion detection push notifications between **1** (lowest) and **10** (highest) and press **OK**.
5. Under **PIR**, select **ON** to enable Push Alarm Notifications when motion is detected using the PIR motion sensor or **OFF** to disable.
6. Under **Sound**, select **ON** to enable Push Alarm Notifications when sound is detected by the camera or **OFF** to disable. Under **Sound Sensitivity**, select a sensitivity for Sound Push Alarm Notifications between **1** (lowest) and **10** (highest) and press **OK**.
7. Tap **Update** to save your settings.

## *5.4.4 CONFIGURING TEMPERATURE PUSH NOTIFICATIONS AND TEMPERATURE UNITS (FAHRENHEIT OR CELSIUS)*

Temperature Push Notifications can be set up to send you alerts if the temperature near the camera goes higher or lower than the specified values. You can also select the temperature unit that will be used by the system.




Example of temperature push notification

**To configure temperature push notifications:**

1. In Camera List, tap  next to the camera.

2. Tap **Alarm notification**.


Select ON to enable temperature notifications

Select temperature units

Select the high temperature value that will trigger notifications

Select the low temperature value that will trigger notifications

3. Under **Temperature**, select **ON** to enable temperature notifications.
4. Under **Temperature unit**, select **F°** or **C°**.
5. Under **Higher bound**, select the high temperature value. You will receive a notification if the temperature near the camera goes above this value.
6. Under **Lower bound**, select the low temperature value. You will receive a notification if the temperature near the camera goes above this value.
7. Tap **Update** to save your settings.

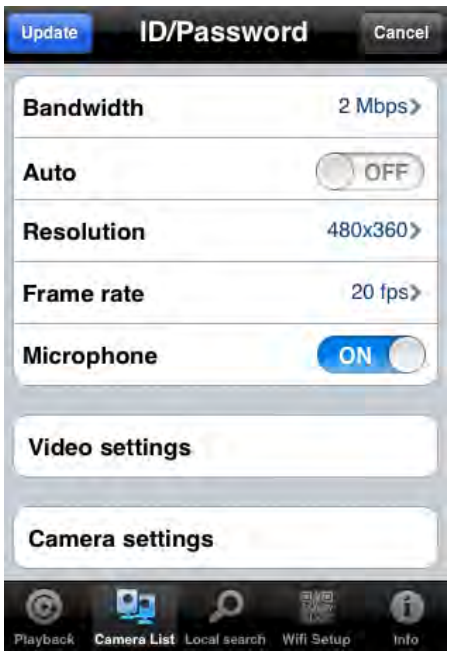
## *5.4.5 EDITING CAMERA MOBILE STREAMING SETTINGS*

Configure the camera image quality settings for streaming to mobile devices (i.e. smart phones and tablets). Please note that less bandwidth is generally available over mobile networks than over WiFi or Ethernet.

**To edit mobile streaming settings:**

1. In Camera List, tap  next to the camera.

2. Tap **Stream Settings**.




— Select Mobile Bandwidth

— Enable/disable auto resolution and frame rate adjustement

— Select Resolution

— Select Frame rate

— Enable/disable audio streaming

3. Under **Bandwidth**, select the bandwidth for your mobile connection. If you are mainly connecting using WiFi, you may set this setting higher.
4. Under **Auto**, select **ON** to have the camera automatically select the resolution and frame rate based on available bandwidth. Or, select **OFF** to manually select the resolution and frame rate. If you select OFF, configure the following:
   - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240**, **480x360**, **640x400**, or **1024x768**.
   - Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
5. Under **Microphone**, select **OFF** to turn off audio streaming to your mobile device or tap to select **ON** to turn on audio streaming to your mobile device.
6. Tap **Update** to save your settings.

## *5.4.6 EDITING CAMERA VIDEO SETTINGS*

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**.

3. Tap **Video**.


— Select Color or Black & White

— Select Brightness

— Select Sharpness

— Select Low light sensitivity

— Select environment settings

— Select quality preference

— Enable/disable time stamps

— Enable/disable video flip

4. Configure the following:
   - **Video color:** Select **Colored** to view the camera in color or select **Black & white**. Tap **Video** to return to Video settings.
   - **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest). Tap **Video** to return to Video settings.
   - **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest). Tap **Video** to return to Video settings.
   - **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High** , and **Normal** (lowest). Tap **Video** to return to Video settings.
   - **Place:** Select **Outdoor** for well lit environments. Select **Indoor** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor + Sunlight** if the picture is too bright on the Indoor Video setting. If you select an indoor setting, select **60Hz** or **50Hz** to adjust the camera for the frequency of your indoor lighting. Tap **Video** to return to Video settings.
   - **Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth

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is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection. Tap **Video** to return to Video settings.

- **Time Display on Video:** Select **ON** to enable time stamps on video or **OFF** to disable time stamps.
- **Video flip:** Select **ON** to flip the camera image vertically and horizontally or select **OFF** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.

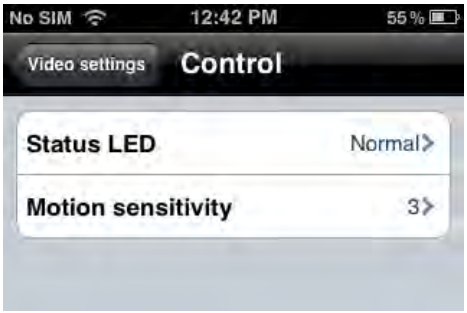
5. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

## *5.4.7 CONFIGURING LED CONTROL AND MOTION DETECTION SENSITIVITY*

Configure the behavior of the camera status LED's. This is useful if you want the camera to be harder to spot at night. You can also configure the sensitivity for video motion detection.

**To configure LED's and motion detection sensitivity:**

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**. Then tap **Control**.




3. Under **Status LED**, select one of the following:
   - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
   - **Always turn off:** LED's are turned off at all times.
   - **Turn off after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.

4. Tap **Control** to return to the Control menu.
5. Under **Motion Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap **Control** to return to the Control menu.

**NOTE:** This setting does not affect the PIR motion detector.

6. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

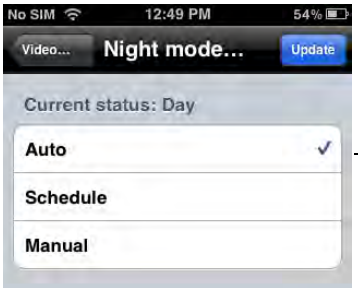


## *5.4.8 CONFIGURING NIGHT MODE SETTINGS*

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.

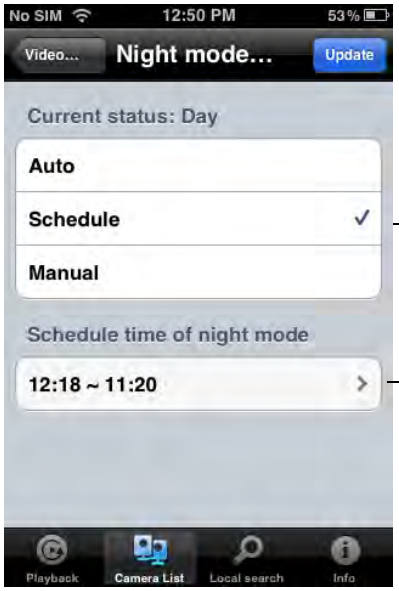
**To configure Day/Night mode:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Video Settings**. Then tap **Night Mode Control**.




3. Select one of the following:
   - **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
   - **Schedule:** Camera will switch between day mode and night mode at a scheduled times each day. If using this option, tap under **Schedule time of night mode**, use the

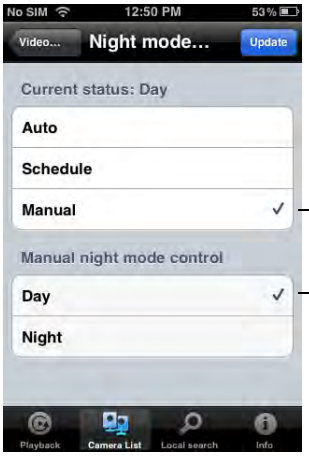
sliders to set the **Start** time (when night mode begins each day) and **End** time (when night mode ends each day), then tap **OK**.




Select Schedule to schedule day/night mode switch

Tap to configure day/ night mode schedule

- **Manual:** Manually select day mode or night mode. If using this option, select **Day** for day mode or **Night** for night mode.




Select Manual

Select Day or Night mode

4. Tap **Update** to save your changes.

## *5.4.9 EDITING CAMERA WIRED NETWORK SETTINGS*

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

**To edit camera wired network settings:**

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Camera Settings**.
3. Tap **Network** then **Wired Network**.


— Select DHCP or Static

— If Static, configure IP address information

4. Select **DHCP** (recommended) to allow the camera to automatically obtain an IP address from the router or **Static** to use fixed IP address settings. If you select Static, configure your **IP Address**, **Subnet mask**, **Default gateway**, **DNS1**, and **DNS2**.
5. Tap **Update** to save your settings.

## *5.4.10 EDITING CAMERA WIFI NETWORK SETTINGS*

Configure WiFi network settings for the camera.

**To edit camera WiFi settings:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Network** then **WiFi Network**.
4. Slide WiFi to **ON** to enable WiFi on the camera and scan for available networks.
5. Tap a WiFi network and enter the password to connect.

- To connect to a hidden WiFi network, tap **Other**. Enter the SSID and select the security type and tap **Add**. Tap the network name from the list and enter the password.


6. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Press **Camera Settings** then **Camera List** to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

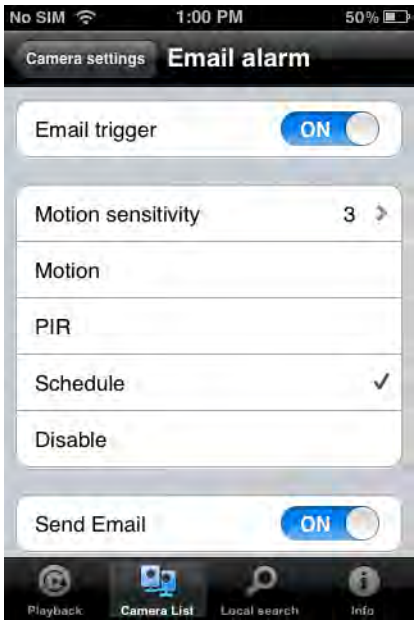
## *5.4.11 ENABLING EMAIL NOTIFICATIONS*

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

**To enable email notifications:**

1. In Camera List, tap  next to the camera.
2. Tap **Camera Settings**.

3. Tap **Schedule** then **Email Alarm**.




— Enable/disable email notifications

— Select motion sensitivity for video motion

— Select email triggers

— Enable/disable email notifications

4. Under **Email trigger**, select **ON** to enable email notifications or **OFF** to disable. Then under **Send Email**, select **ON** to enable email notifications.
5. Under **Motion sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap **Email alarm** to return to the Email Alarm menu.

**NOTE:** This setting does not affect the PIR motion detector.

6. Check the following trigger options for email alarms:
   - **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
   - **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

English

- **Schedule:** Send email alarms based on the settings configured in the Scheduling menu.
- **Disable:** Disable email alarms.

7. Enter up to 3 email addresses under **Recipient1~3** that will receive email alarms.


Enter recipient email addresses

8. Tap **Update** to save your changes.

**NOTE:** If you want to use a custom SMTP server to send Email messages, click **SMTP Settings**, enter your SMTP server information, and tap **OK**.

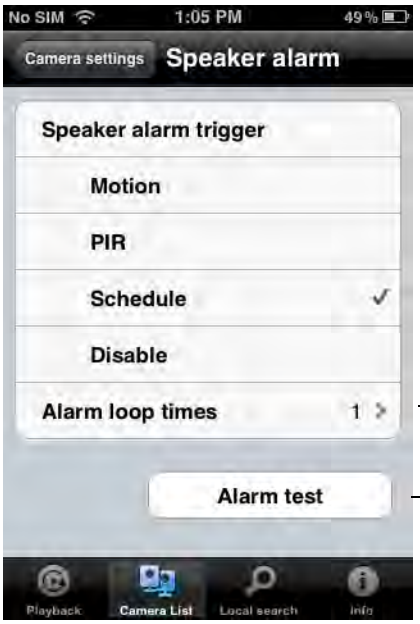
## *5.4.12 ENABLING SPEAKER ALARMS*

Configure the siren. The siren can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.

**To configure speaker alarms:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Schedule** then **Speaker Alarm**.




Select speaker alarm triggers

Select number of times speaker alarm will repeat

Test speaker alarm

4. Under **Speaker Alarm Trigger**, check the triggers that will cause speaker alarms:
   - **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
   - **PIR:** Use the PIR motion detector to trigger speaker alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

   - **Schedule:** Create speaker alarms based on the settings set in the Scheduling menu.
   - **Disable:** Disable speaker alarms.
5. Under **Alarm Loop Times**, select the number of times you would like the speaker alarm to repeat when alarms occur.
6. Tap **Alarm Test** to sound a test alarm.
7. Tap **Update** to save your settings.

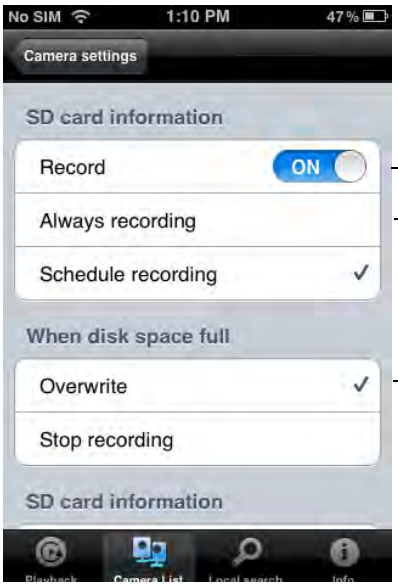
English

## *5.4.13 CONFIGURING MICROSD RECORDING*

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone®, iPad®, or Android™ apps.

**To configure microSD card recording:**

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **SD-Card**.




5. Under **Recording**, select **ON** to enable microSD recording or **OFF** to disable.
6. Check one of the following recording options:
   - **Always Recording:** Camera will record continuously at all times.
   - **Schedule Recording:** Camera will record according to settings set in the recording schedule.

**NOTE:** To enable Motion detection recording using iPhone®, you must use Schedule recording. Then, create a schedule in the Scheduling menu with Motion trigger, PIR trigger, or both Motion trigger and PIR trigger selected.

7. Under **When disk space full**, check **Overwrite** to set the camera to overwrite the oldest recordings when the microSD card is full or select **Stop recording** to set the camera to stop recording when the microSD card is full.
8. Tap **Update** to save your settings.

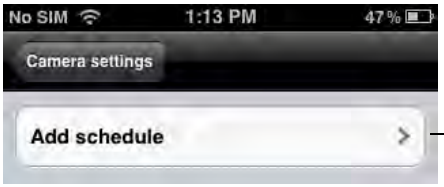
## *5.4.14 CONFIGURING THE CAMERA RECORDING AND ALARM SCHEDULE*

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.



**To create a schedule for alarms or recording:**

1. First, you must enable alarms or recording to use the schedule.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **Scheduling**.
5. Tap **Add Schedule**.




Add Schedule

6. Under **Email Alarm**, check **Motion trigger** to send an email alarm based on video motion, select PIR trigger to use the PIR motion sensor, or select both Motion Trigger and PIR trigger.


Configure triggers for email alarms in this schedule

Configure triggers for speaker alarms in this schedule

7. Under **Speaker Alarm**, check **Motion trigger** to create a speaker alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both Motion trigger and PIR trigger.

8. Under **SD card record**, check **Continuous** for the camera to record to microSD continuously during the scheduled time. Check **Motion trigger** to record when video motion is trigger during the scheduled time, select **PIR trigger** to record when the PIR motion sensor is triggered during the scheduled time, or select both.


Configure triggers for microSD recording in this schedule

9. Under **Time period**, select one of the following:

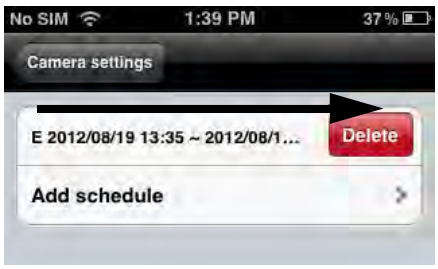
- **Every week:** Create a weekly recording schedule. Tap  and check the days you would like the schedule to apply to. Tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
- **Every day:** Create a daily recording schedule. Tap  then tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
- **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Tap  then tap **Start** and **End** and use the sliders to configure the exact date and time when you would like the schedule to start and end. Tap **OK**.


Configure schedule times

9.Tap **OK** to save the schedule. Tap **Update** to save your settings.

**To delete a Schedule:**

1. From the Scheduling menu, swipe the schedule you would like to delete from left to right.




Swipe from left to right and then tap delete to delete a schedule

2. Tap **Delete**.
3. Tap **Update** to save your changes.



## *5.4.15 CONFIGURING THE CAMERA DATE AND TIME*

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

**To set the camera date and time:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Date/Time**.


Tap Time zone

4. Tap **Time Zone**.

5. Use the slider to select your time zone.


Select your time zone

Enable Daylight Savings and configure start and end times for daylight savings

- If your region observes Daylight Savings Time, check **Daylight Savings Time**. Tap **Start Time** and **End Time**, use the sliders to configure the start and end time for Daylight Savings Time and then tap **OK**. Tap **Back** to return.

6. Tap **Update** to save your changes. Tap **OK**. The camera will reboot to apply the new time zone.

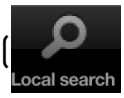
## *5.4.16 REBOOTING THE CAMERA*

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Reboot**.
4. Tap **OK** to confirm.

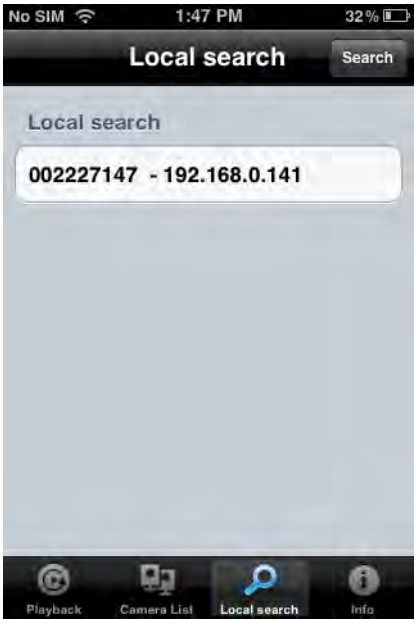
# 5.5 USING LOCAL SEARCH TO ADD CAMERAS

You can use the Local Search Menu to automatically add the ID's for cameras on your local network.

**To add cameras using local search:**

1. Tap the Local Search button ( 

).
2. Lorex Ping automatically scans for cameras on your local network. Tap **Search** to re-scan.




Tap Search to re-scan

Tap a camera to add to camera list

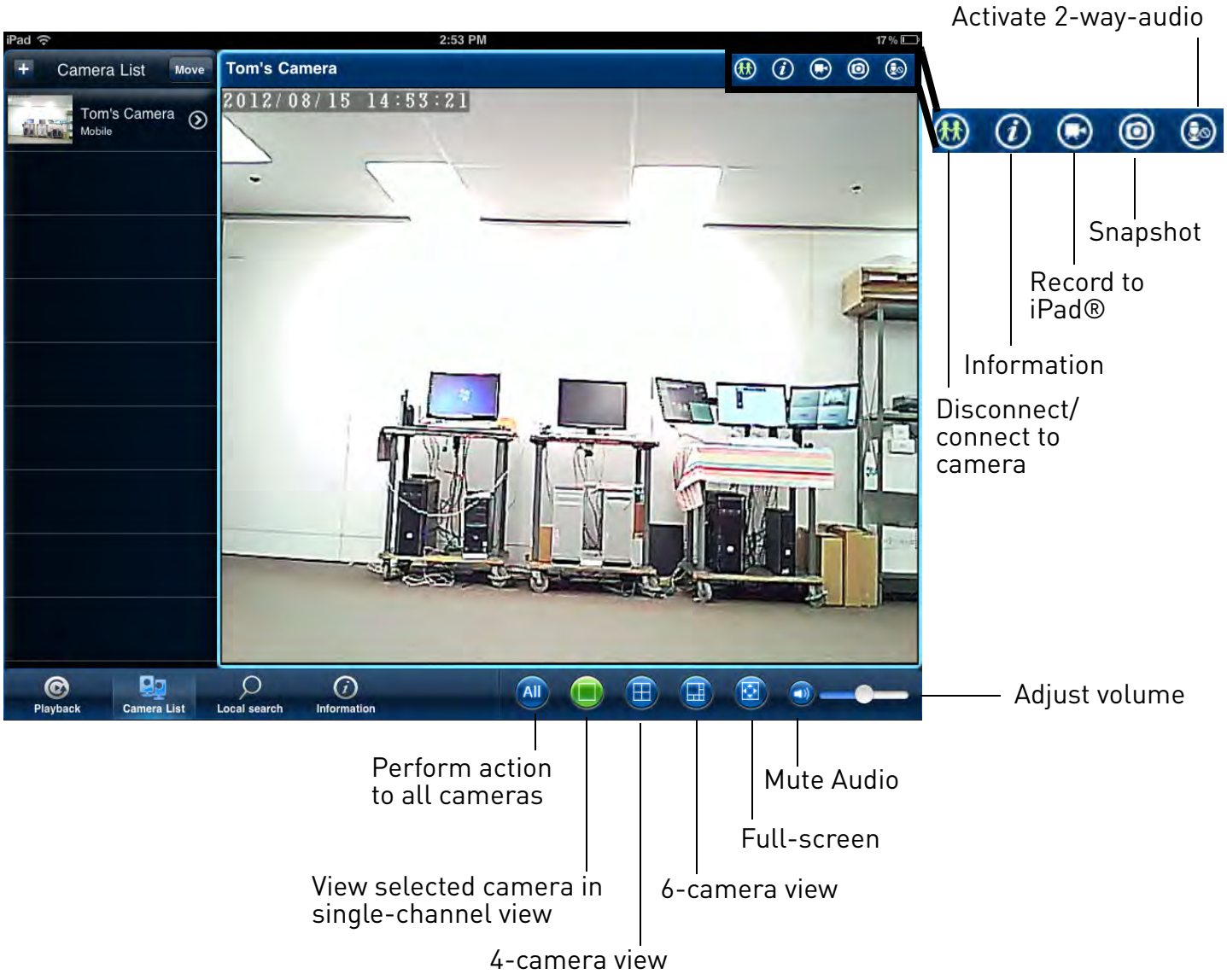
3. Tap a camera from the list. The Add camera screen comes on with the camera ID already entered.
4. Enter a **Name** of your choice and enter the camera **Password**. If you have not connected to your camera before, the password is **lorex**.
5. Tap **Done**. The camera is now added to camera list. Tap the camera name in Camera List to connect to the camera.

# 6. IPAD® APP

The app for iPad® is called **Lorex Ping HD**.

For instructions on connecting to your camera using iPad®, see “Connecting to your Camera on iPad®” on page 9.

## 6.1 LIVE VIEWING WITH LOREX PING HD



### *6.1.1 USING 2-WAY AUDIO (INTERCOM)*

1. While viewing, touch  to activate 2-way-audio (intercom) using the phone microphone.
2. Tap  again to deactivate 2-way-audio.

### *6.1.2 TAKING SNAPSHOTS*

- While viewing, tap  to take a snapshot from the camera. You can view snapshots using the Camera app or save photos to your computer by connecting your iPad® to your computer using a USB cable.

**NOTE:** There is no Camera app on 1st generation iPads. To view your snapshots, you must connect the iPad to your computer using a USB cable.

### *6.1.3 RECORDING VIDEO TO IPAD*

You can manually record video from your camera directly to your iPad's built in memory.

**To record video to your iPad's memory:**

1. While viewing, tap  to start recording.
2. Tap  again to stop recording. To view the recorded video, see below.

## 6.2 PLAYING BACK VIDEO RECORDED TO IPAD®

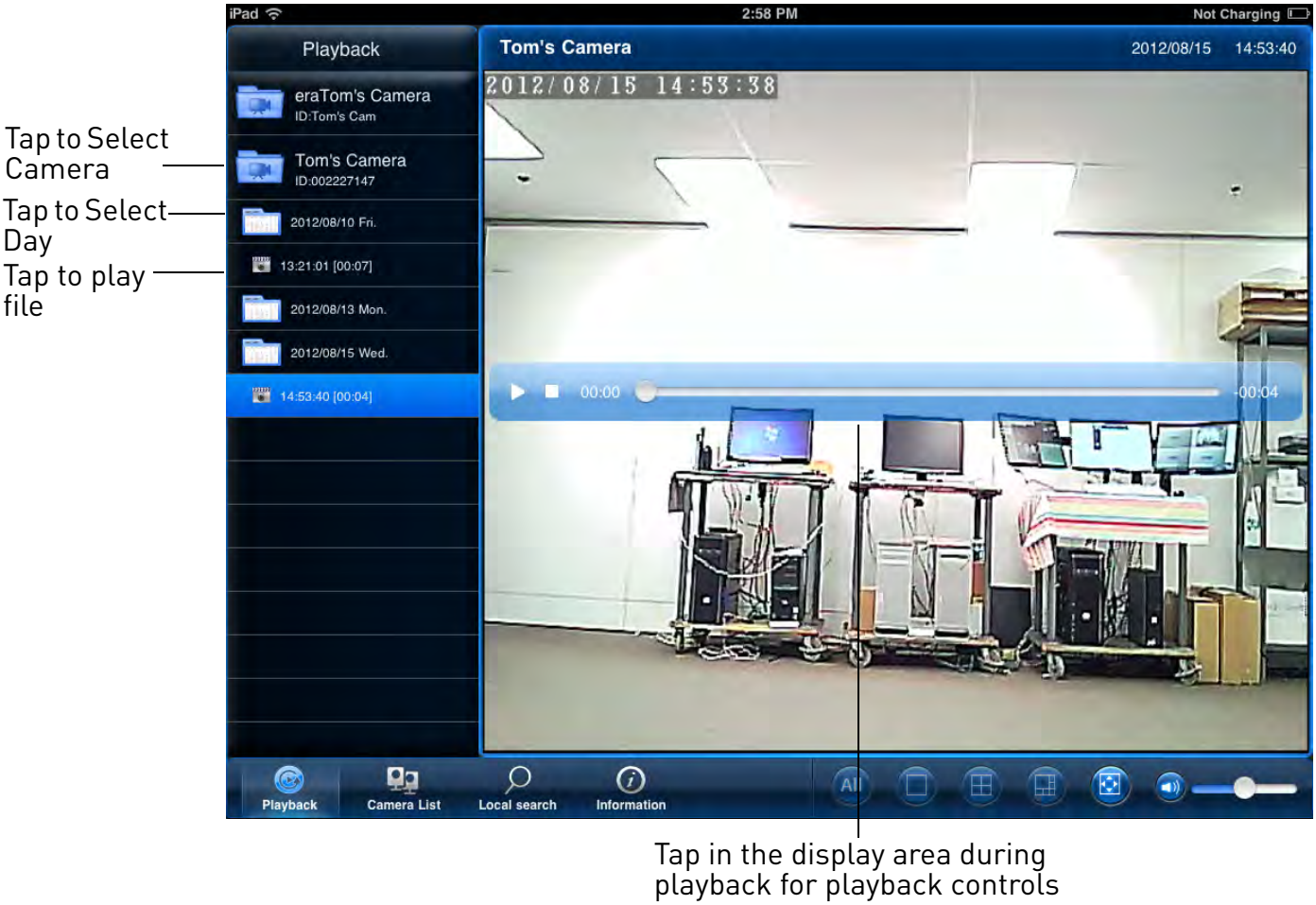
After using the record button to record video to your iPad®, you can playback video on iPad®.

**To playback video recorded to iPad®:**

1. Tap the Playback button ( 

) then tap **iPad**.
2. Select the camera you would like to playback video from. A list of days with recorded video appears.
3. Tap a day to see recordings from that day. Tap a recording to start playback.

4. During playback, tap in the display area to bring up playback controls.



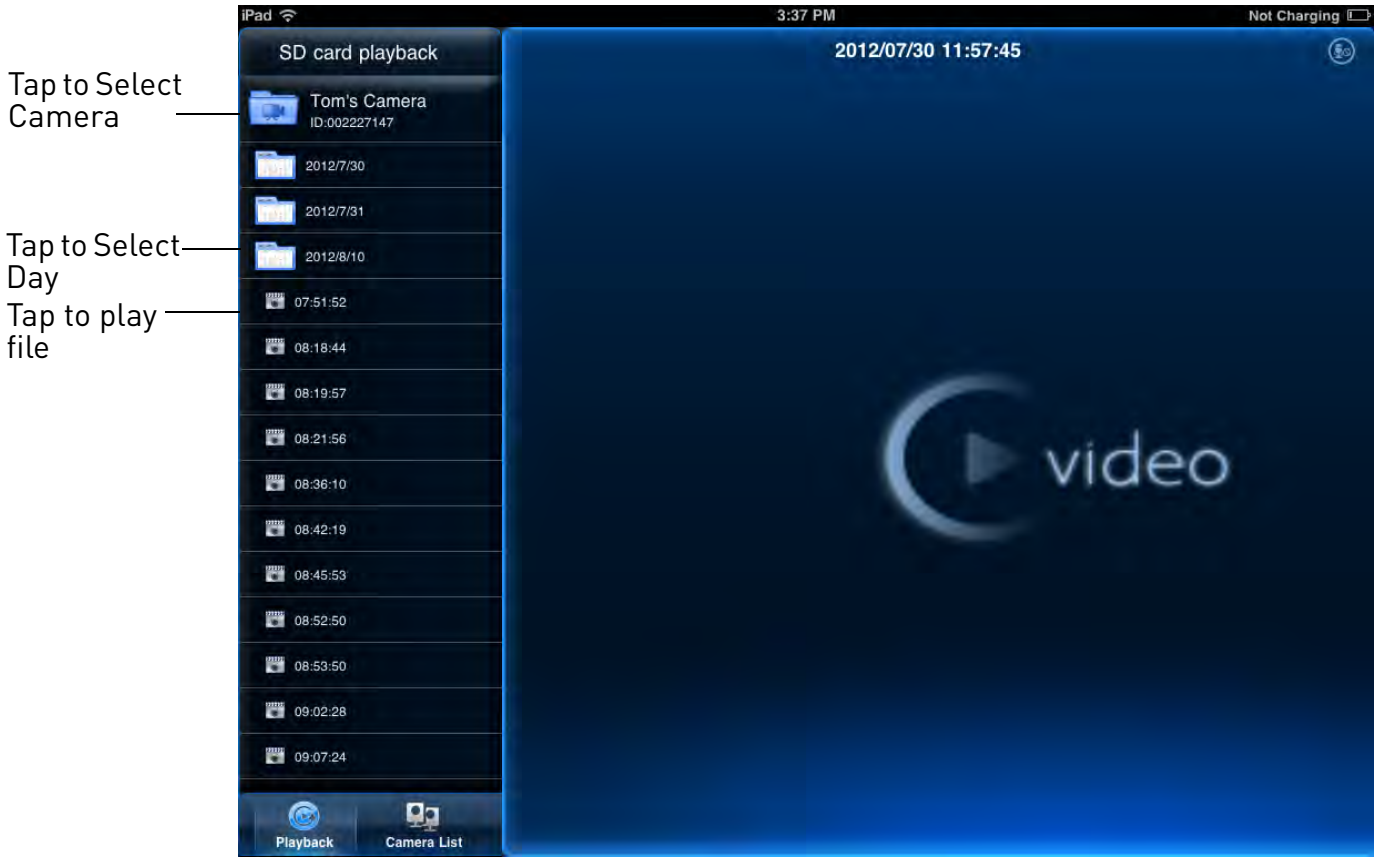

# 6.3 PLAYING BACK VIDEO RECORDED TO MICROSD ON IPAD®

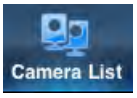
You can playback video recorded on the camera microSD card (not included) on your iPad®. For details on setting up microSD recording, see “Configuring MicroSD Recording” on page 123.

**To play back video recorded on the camera microSD card:**

1. Tap the Playback button ( 

) then tap **SD Card**.
2. Select the camera you would like to playback from.
3. The camera scans for recorded video files and shows a list of days with recorded video. Tap a day to view recordings created on that day.
4. Tap a recording to play it.




5. Tap the Camera List button ( 

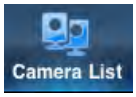
) to exit playback.

English

# 6.4 USING CAMERA LIST TO EDIT CAMERA SETTINGS

You can use the Camera List to adjust the connections settings or other settings for your camera.

**To access Camera Settings:**

1. Tap Camera List 

. Then tap  next to the camera you would like to edit.
2. For certain menus, you will need to enter the camera admin user name and password before you may change settings. By default, the admin user name is **admin** and the password is **left blank**.

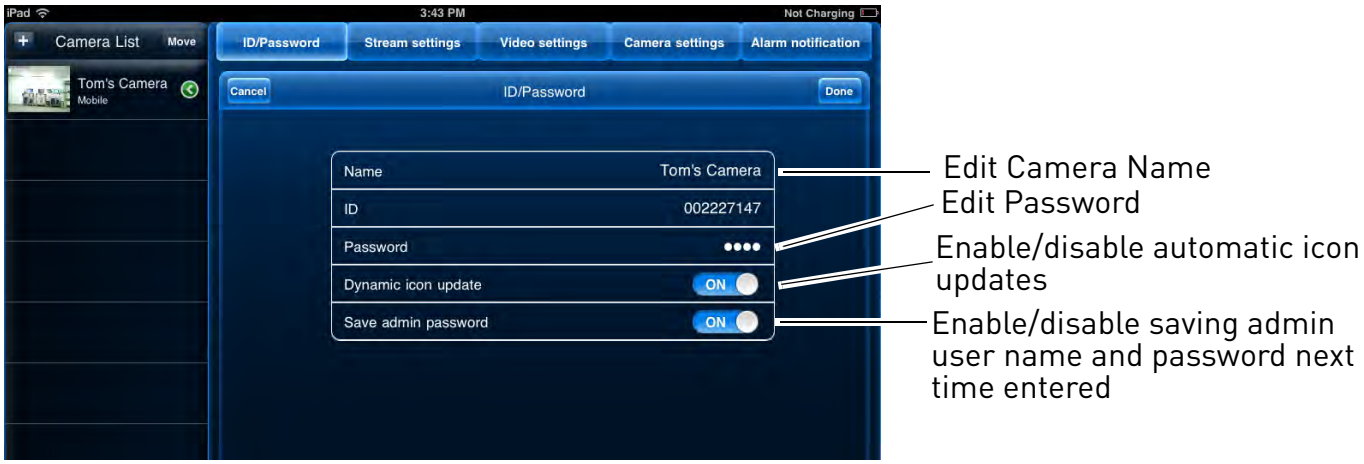

## *6.4.1 EDITING CAMERA CONNECTION SETTINGS*

You can edit your camera connection information. This is useful if you change the password of the camera or if you want to save the admin user name and password, so you don't have to enter it to make settings changes.

**To edit camera connection settings:**

1. In Camera List, tap  next to the camera you would like to edit.

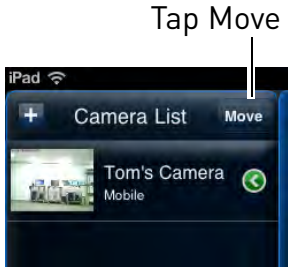
2. Change the **Name** and **Password** as needed.
3. Under **Dynamic icon update**, select **ON** to have the camera icon automatically update every time you connect to the camera, or select **OFF** to keep the icon as is.
4. Under **Save admin password**, select **ON** to have Lorex Ping save the admin user name and password the next time you enter it, or **OFF** to require the admin user name and password whenever settings changes are made.




5. Tap **Done** to save changes.

## *6.4.2 DELETING CAMERAS FROM CAMERA LIST*

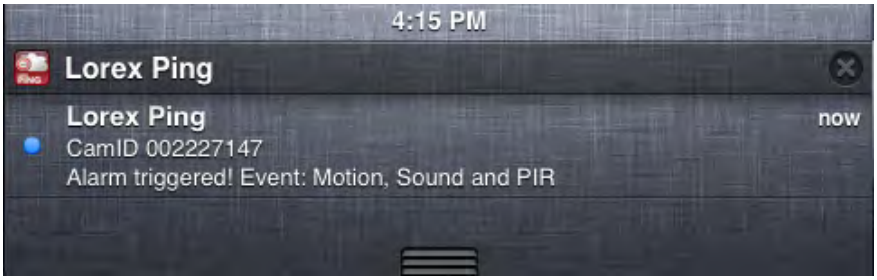
1. In Camera List, tap **Move**.




2. Tap ⊖ next to the camera you would like to delete then tap **Delete** to confirm.
3. Tap **Done**.

## *6.4.3 EDITING MOTION/ SOUND NOTIFICATION SETTINGS (PUSH NOTIFICATIONS)*

Push Alarm Notifications can be set up to create a notification straight to your iPad® when motion or sound is detected by the camera. Push Alarm Notifications go directly to the notifications area on your device.




Example of Push Notification

**To enable Push Alarm Notifications:**

1. In Camera List, tap  next to the camera.
2. Tap **Alarm notification**.


Alarm Notification

Enable/disable push notifications for video motion detection

Enable/disable push notifications for sound

Select sensitivity for sound push notifications

Enable/disable push notifications for PIR motion detection

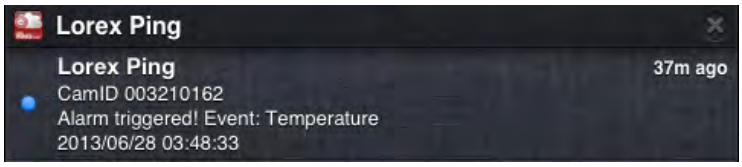
3. Under **Motion**, select **ON** to enable Push Alarm Notifications when motion is detected using video motion detection or **OFF** to disable.

4. Under **PIR**, select **ON** to enable Push Alarm Notifications when motion is detected using the PIR motion sensor or **OFF** to disable.
5. Under **Sound**, select **ON** to enable Push Alarm Notifications when sound is detected by the camera or **OFF** to disable. Under **Sound Sensitivity**, select a sensitivity for Sound Push Alarm Notifications between **1** (lowest) and **10** (highest).
6. Tap **Update** to save your settings.



## *6.4.4 CONFIGURING TEMPERATURE PUSH NOTIFICATIONS AND TEMPERATURE UNITS (FAHRENHEIT OR CELSIUS)*

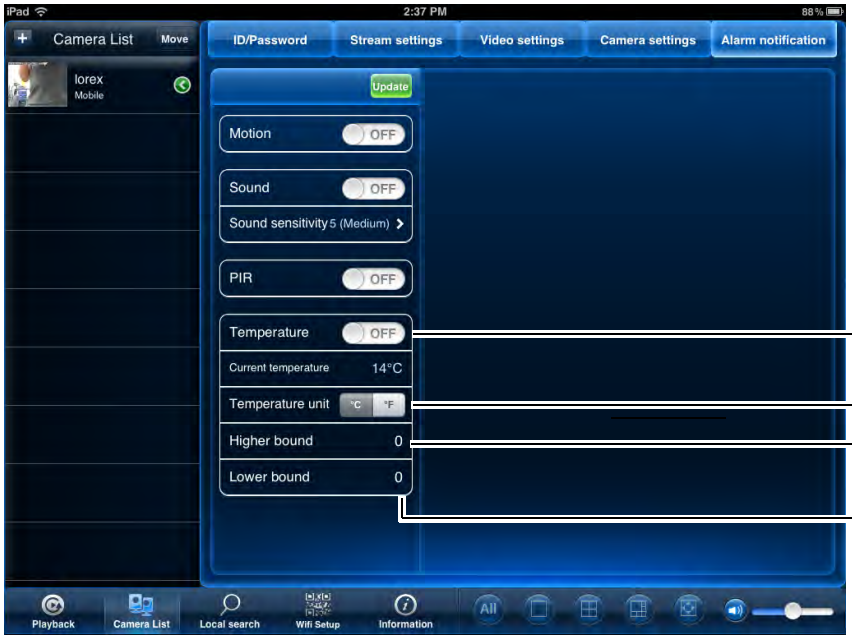
Temperature Push Notifications can be set up to send you alerts if the temperature near the camera goes higher or lower than the specified values. You can also select the temperature unit that will be used by the system.




Example of temperature push notification

**To configure temperature push notifications:**

1. In Camera List, tap  next to the camera.
2. Tap **Alarm notification**.




Select ON to enable temperature notifications

Select temperature units

Select the high temperature value that will trigger notifications

Select the low temperature value that will trigger notifications

3. Under **Temperature**, select **ON** to enable temperature notifications.
4. Under **Temperature unit**, select **F°** or **C°**.
5. Under **Higher bound**, select the high temperature value. You will receive a notification if the temperature near the camera goes above this value.
6. Under **Lower bound**, select the low temperature value. You will receive a notification if the temperature near the camera goes above this value.
7. Tap **Update** to save your settings.

## *6.4.5 EDITING CAMERA MOBILE STREAMING SETTINGS*

Configure the camera image quality settings for streaming to mobile devices (i.e. smart phones and tablets). Please note that less bandwidth is generally available over mobile networks than over WiFi or Ethernet.

**To edit mobile streaming settings:**

1. In Camera List, tap  next to the camera.
2. Tap **Stream Settings**.


3. Under **Bandwidth**, select the bandwidth for your mobile connection. If you are mainly connecting using WiFi, you may set this setting higher.
4. Under **Auto**, select **ON** to have the camera automatically select the resolution and frame rate based on available bandwidth. Or, select **OFF** to manually select the resolution and frame rate. If you select OFF, configure the following:

- Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240**, **480x360**, **640x400**, or **1024x768**. Tap **Done** to confirm.
- Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest). Tap **Done** to confirm.

5. Under **Microphone**, select **OFF** to turn off audio streaming to your mobile device or tap to select **ON** to turn on audio streaming to your mobile device.
6. Tap **Update** to save your settings.

## *6.4.6 EDITING CAMERA VIDEO SETTINGS*

1. In Camera List, tap  next to the camera.
2. Tap **Video Settings**.
3. Tap **Video**.


Select Colored or Black & White
Select Brightness
Select Sharpness
Select low light sensitivity
Select environment settings
Select quality preference
Enable/disable time stamps
Enable/disable video flip

4. Configure the following:
   - **Video color:** Select **Colored** to view the camera in color or select **Black & white**. Tap **Done** to return to Video settings.
   - **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest). Tap **Done** to return to Video settings.
   - **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest). Tap **Done** to return to Video settings.

- **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest). Tap **Done** to return to Video settings.
- **Place:** Select **Outdoor** for well lit environments. Select **Indoor** if you notice strip lines in the image or if the picture is too dark on the **Outdoor** video setting. Select **Indoor + Sunlight** if the picture is too bright on the Indoor setting. If you select an indoor setting, select **60Hz** or **50Hz** to adjust the camera for the frequency of your indoor lighting. Tap **Done** to return to Video settings.
- **Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection. Tap **Done** to return to Video settings.
- **Time Display on Video:** Select **ON** to enable time stamps on video or **OFF** to disable time stamps.
- **Video flip:** Select **ON** to flip the camera image vertically and horizontally or select **OFF** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.

5. Tap **Update** to save your settings.

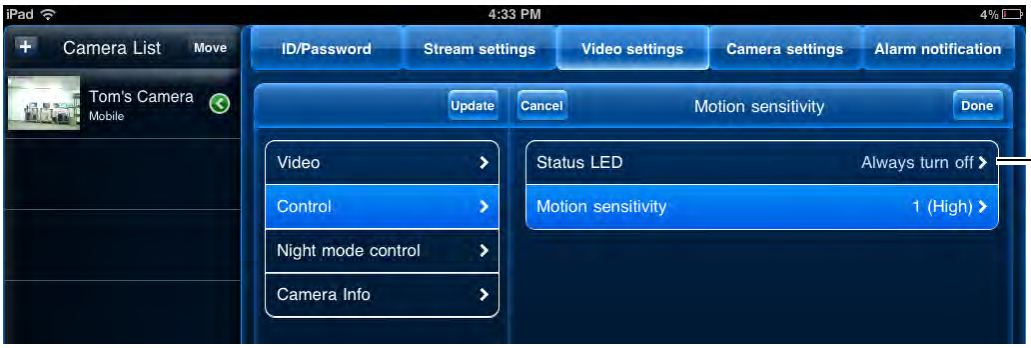
## *6.4.7 CONFIGURING LED CONTROL AND MOTION DETECTION SENSITIVITY*

Configure the behavior of the camera status LED's. This is useful if you want the camera to be harder to spot at night. You can also configure the sensitivity for video motion detection.

**To configure LED's and motion detection sensitivity:**

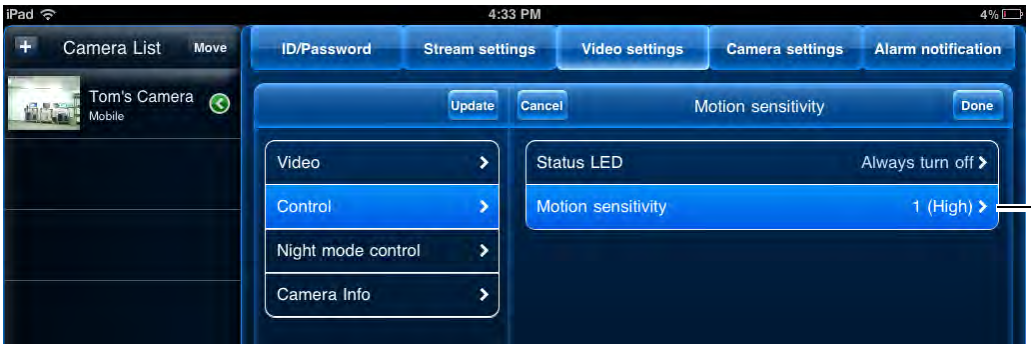
1. In Camera List, tap  next to the camera.

2. Tap **Video Settings**. Then tap **Control**.




Set control settings for status LED's

3. Under **Status LED**, select one of the following:
   - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
   - **Always turn off:** LED's are turned off at all times.
   - **Turn off after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
4. Tap **Done** to return to the Control menu.
5. Under **Motion Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap Control to return to the Control menu.




Set video motion detection sensitivity

**NOTE:** This setting does not affect the PIR motion detector.

6. Tap **Update** to save your settings.

## *6.4.8 CONFIGURING NIGHT MODE SETTINGS*

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the

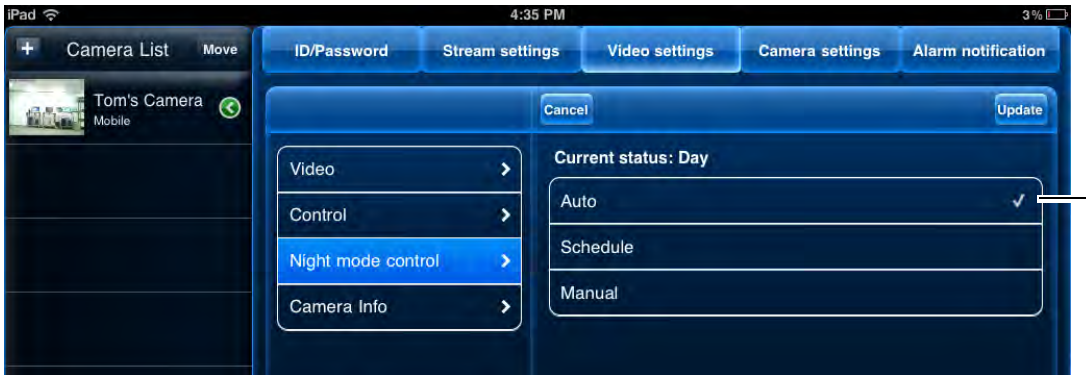


English

Infrared LED turns on to enable night vision.

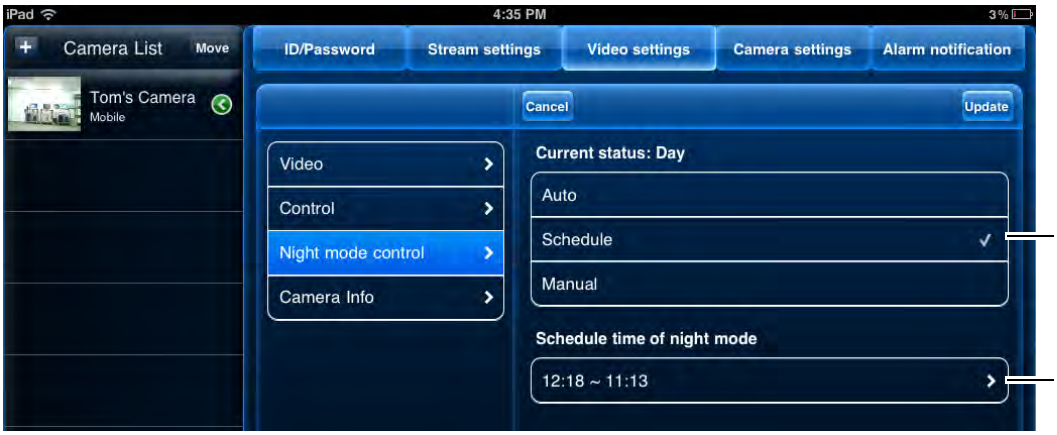
**To configure Day/Night mode:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Video Settings**. Then tap **Night Mode Control**.




Select Day/Night mode control type

3. Select one of the following:
   - **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
   - **Schedule:** Camera will switch between day mode and night mode at scheduled times each day. If using this option, tap under **Schedule time of night mode**, use the sliders to set the **Start** time (when night mode begins each day) and **End** time (when night mode ends each day), then tap **Done**.




Select Scheduled Day/ Night control

Create schedule for Day/ Night mode

   - **Manual:** Manually select day mode or night mode. If using this option, select **Day** for day mode or **Night** for night mode.
4. Tap **Update** to save your changes.

## 6.4.9 EDITING CAMERA WIRED NETWORK SETTINGS

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

**To edit camera wired network settings:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Network** then **Wired Network**.


4. Select **DHCP** (recommended) to allow the camera to automatically obtain an IP address from the router or **Static** to use fixed IP address settings. If you select Static, configure your **IP Address**, **Subnet mask**, **Default gateway**, **DNS1**, and **DNS2**.
5. Tap **Update** to save your settings.

## 6.4.10 EDITING CAMERA WIFI NETWORK SETTINGS

Configure WiFi network settings for the camera.

**To edit camera WiFi settings:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Network** then **WiFi Network**.


4. Slide **WiFi** to **ON** to enable WiFi on the camera and scan for available networks.
5. Tap a WiFi network and enter the password to connect.
   - To connect to a hidden WiFi network, tap **Other**. Enter the SSID and select the security type and tap **Done**. Tap the network name from the list and enter the password.
6. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Tap  next to the camera to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

## *6.4.11 ENABLING EMAIL NOTIFICATIONS*

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

**To enable email notifications:**

1. In Camera List, tap  next to the camera.

2. Tap **Camera Settings**.


3. Tap **Schedule** then **Email Alarm**.
4. Under **Email trigger**, select **ON** to enable email notifications or **OFF** to disable. Then under **Send Email**, select **ON** to enable email notifications.
5. Under **Motion sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection. Tap Email alarm to return to the Email Alarm menu.

**NOTE:** This setting does not affect the PIR motion detector.

6. Check the following trigger options for email alarms:
   - **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.

English

- **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Send email alarms based on the settings configured in the Scheduling menu.

7. Enter up to 3 email addresses under **Recipient1~3** that will receive email alarms.
8. Tap **Update** to save your changes.

**NOTE:** If you want to use a custom SMTP server to send Email messages, click **SMTP Settings**, enter your SMTP server information, and tap **OK**.

## *6.4.12 ENABLING SPEAKER ALARMS*

Configure the siren. The siren can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.

**To configure speaker alarms:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Schedule** then **Speaker Alarm**.


4. Under **Speaker Alarm Trigger**, check the triggers that will cause speaker alarms:

- **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
- **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.



- **Schedule:** Create audio alarms based on the settings set in the Scheduling menu.
- **Disable:** Disable speaker alarms.

5. Under **Alarm Loop Times**, select the number of times you would like the speaker alarm to repeat when alarms occur. Tap **Done**.
6. Tap **Alarm Test** to sound a test alarm.
7. Tap **Update** to save your settings.

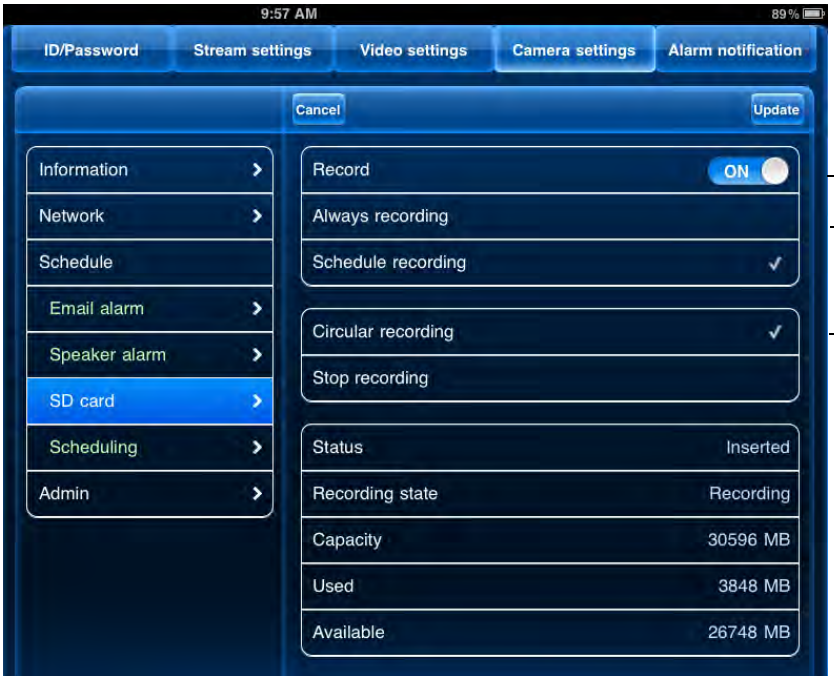
## *6.4.13 CONFIGURING MICROSD RECORDING*

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone®, iPad®, or Android™ apps.

**To configure microSD card recording:**

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.

4. Tap **Schedule** then **SD-Card**.




5. Under **Recording**, select **ON** to enable microSD recording or **OFF** to disable.
6. Check one of the following recording options:
   - **Always Recording:** Camera will record continuously at all times.
   - **Schedule Recording:** Camera will record according to settings set in the recording schedule.

**NOTE:** To enable Motion detection recording using iPad®, you must use Schedule recording. Then, create a schedule in the Scheduling menu with Motion trigger, PIR trigger, or both Motion trigger and PIR trigger selected.

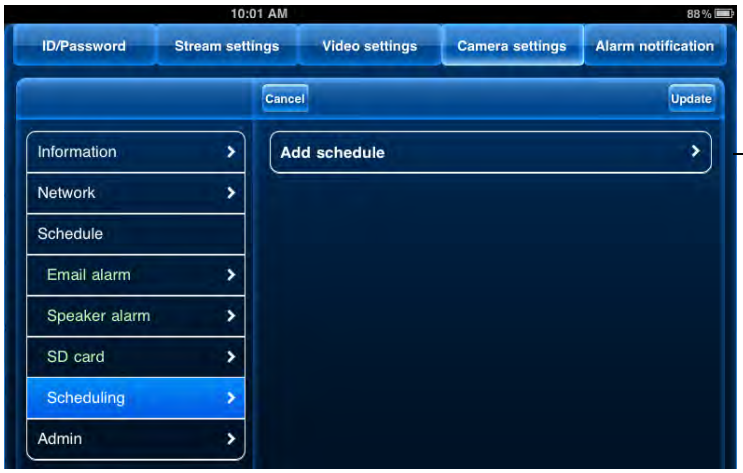
7. Check **Circular recording** to set the camera to overwrite the oldest recordings when the microSD card is full or select **Stop recording** to set the camera to stop recording when the microSD card is full.
8. Tap **Update** to save your settings.

## *6.4.14 CONFIGURING THE CAMERA RECORDING AND ALARM SCHEDULE*

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.

**To create a schedule for alarms or recording:**

1. First, you must enable alarms or recording to use the schedule.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **Scheduling**.
5. Tap **Add Schedule**.




Add Schedule

6. Under **Email Alarm**, check **Motion trigger** to send an email alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both.
7. Under **Speaker Alarm**, check **Motion trigger** to activate the siren based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both.
8. Under **SD card record**, check **Continuous** for the camera to record to microSD continuously during the scheduled time. Check **Motion trigger** to record when video motion is triggered during the scheduled time, select **PIR trigger** to record when the PIR motion sensor is triggered during the scheduled time, or select both.

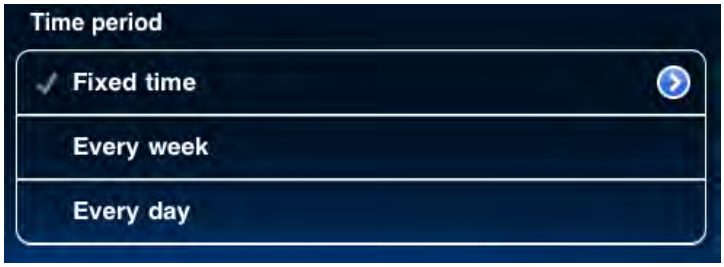

Select triggers for email alarms

Select triggers for speaker alarms

Select triggers for microSD recording

English

9. Under **Time period**, select one of the following:
   - **Every week:** Create a weekly recording schedule. Tap and check the days you would like the schedule to apply to. Tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **Done**.
   - **Every day:** Create a daily recording schedule. Tap then tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **Done**.
   - **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Tap then set the **Start** and **End** using the sliders to configure the exact date and time when you would like the schedule to start and end. Tap **Done**.




10. Tap **Done** to save the schedule. Tap **Update** to save your settings.

**To delete a Schedule:**

1. From the Scheduling menu, swipe the schedule you would like to delete from left to right.
2. Tap **Delete**.
3. Tap **Update** to save your changes.

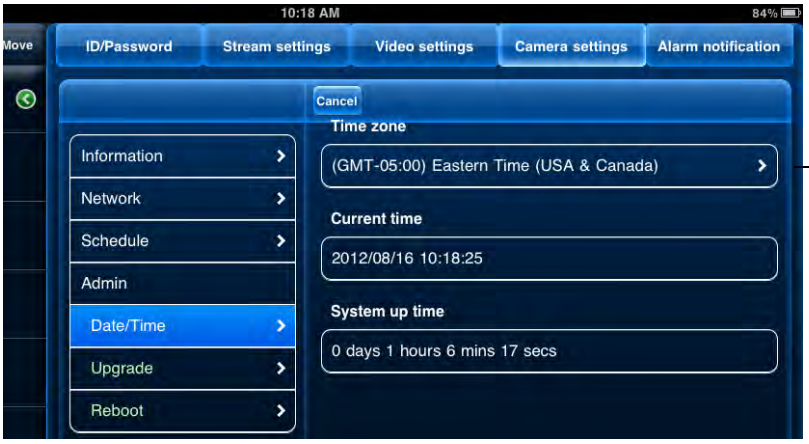
## *6.4.15 CONFIGURING THE CAMERA DATE AND TIME*

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

**To set the camera date and time:**

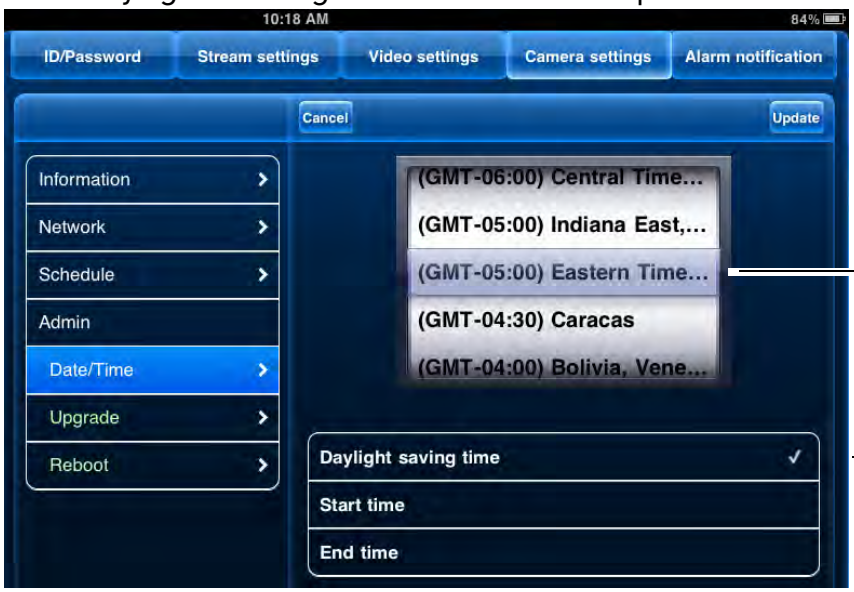
1. In Camera List, tap next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Admin** then **Date/Time**.




Tap Time Zone

4. Tap **Time Zone**.
5. Use the slider to select your time zone.
   - If your region observes Daylight Savings Time, check **Daylight Savings Time**. Tap **Start Time** and **End Time**, use the sliders to configure the start and end time for Daylight Savings Time and then tap **Done**.




Select your Time Zone

Enable Daylight Savings and configure start and end times for daylight savings

6. Tap **Update** to save your changes. Tap **OK**. The camera will reboot to apply the new time zone.

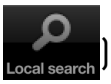
## *6.4.16 REBOOTING THE CAMERA*

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Reboot**.
4. Tap **OK** to confirm.

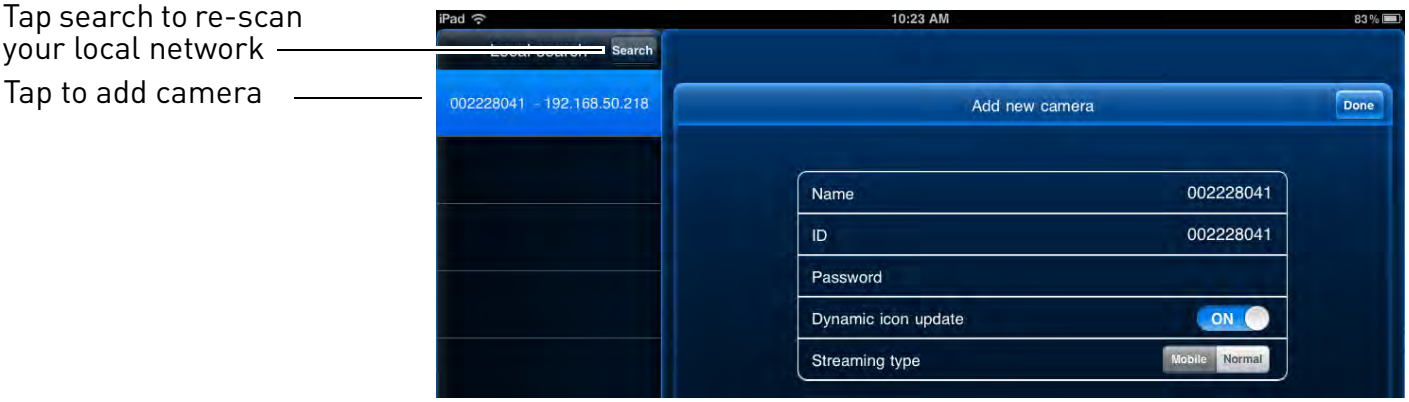
# 6.5 USING LOCAL SEARCH TO ADD CAMERAS

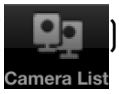
You can use the Local Search Menu to automatically add the ID's for cameras on your local network.

**To add cameras using local search:**

1. Tap the Local Search button ( 

).
2. Lorex Ping automatically scans for cameras on your local network. Tap **Search** to re-scan.




3. Tap a camera from the list. The Add camera screen comes on with the camera ID already entered.
4. Enter a **Name** of your choice and enter the camera **Password**. If you have not connected to your camera before, the password is **lorex**.
5. Tap **Done**. The camera is now added to camera list. Tap the Camera List button ( 

), and then tap the camera name in Camera List to connect to the camera.

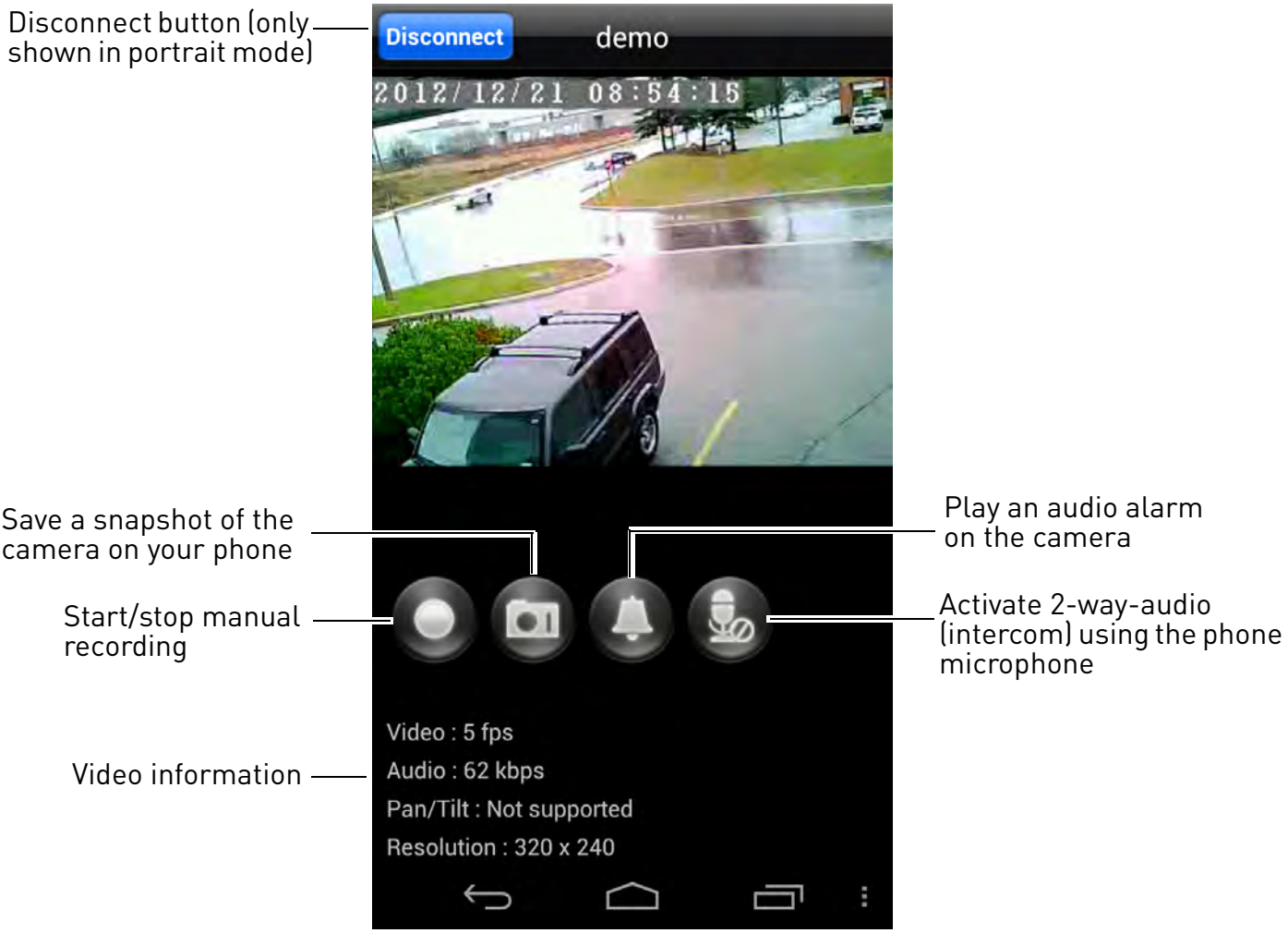
# 7. ANDROID™ APP

The app for Android™ is called **Lorex Ping**. For instructions on connecting to your camera using Android™, “Connecting to your Camera on Android™” on page 18.



## 7.1 LIVE VIEWING WITH LOREX PING FOR ANDROID™

You can use Lorex Ping in portrait or landscape mode. Tilt the phone to switch between portrait or landscape.



### 7.1.1 USING 2-WAY AUDIO (INTERCOM)

1. Touch  to activate 2-way-audio (intercom) using the phone microphone.
2. Touch  again to turn off 2-way audio.

### 7.1.2 SAVING SNAPSHOTS

- Touch  to take a snapshot from the camera. Snapshots are saved in .png format to the *DCIM/Lorex Ping* folder on your device. To view or copy Snapshots to your computer, connect your device to your computer using a USB cable. See your Android™ device's Instruction Manual for details.

### 7.1.3 RECORDING VIDEO TO ANDROID™

You can manually record video to the built-in memory on your Android™ device.

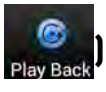
**To record video to your Android™ device:**

1. Press the record button (  ) to begin recording.
2. Press the record button (  ) again to stop recording. To view the recorded video, see below.

## 7.2 PLAYING BACK VIDEO RECORDED TO YOUR ANDROID™ DEVICE

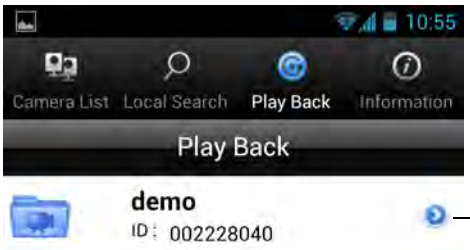
After using the record button to manually record video to your Android™ device, you can use Lorex Ping to play it back.

**To playback video recorded to your Android™ device:**

1. From the Camera List, tap **Play Back (** 

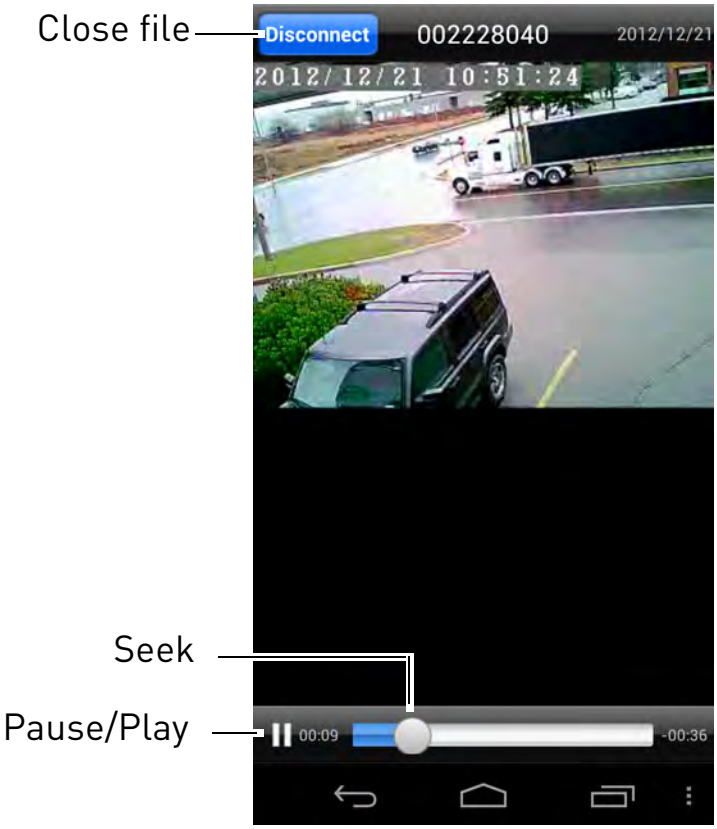
**)**.

2. Tap the camera you would like playback.




3. Select the date that you would like to playback video from, and then tap a video file to open it.


4. Use the on-screen controls to control playback.

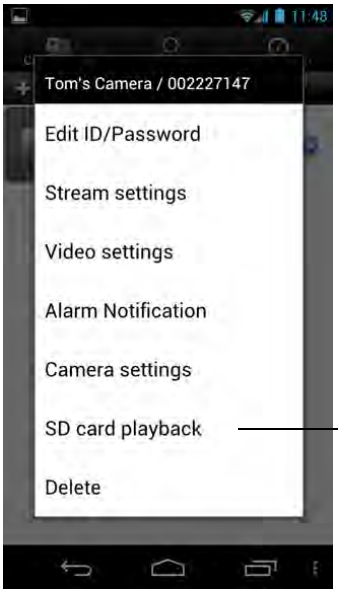


# 7.3 PLAYING BACK VIDEO RECORDED ON MICROSD ON ANDROID™

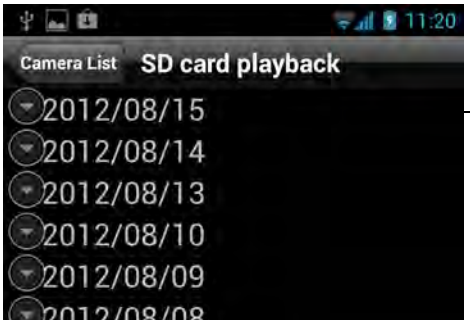
You can playback video recorded on the camera microSD card (not included) on your Android™ phone or tablet. For details on setting up microSD recording, see “Enabling microSD Recording” on page 146.

**To play back video recorded on the camera microSD card:**

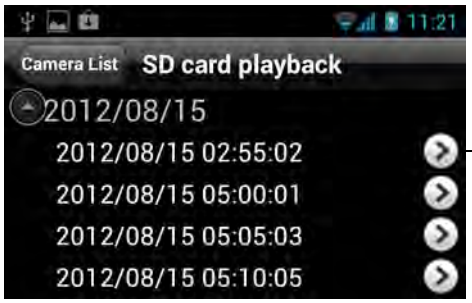
1. From the Camera List, tap  .
2. Tap **SD card playback**.




3. The camera scans for available video files. Files are shown in a list according to the date they were recorded.



4. Tap a day to view recordings for that day. Tap a recording to view it.




5. Tap **Disconnect** to return to the recording list.



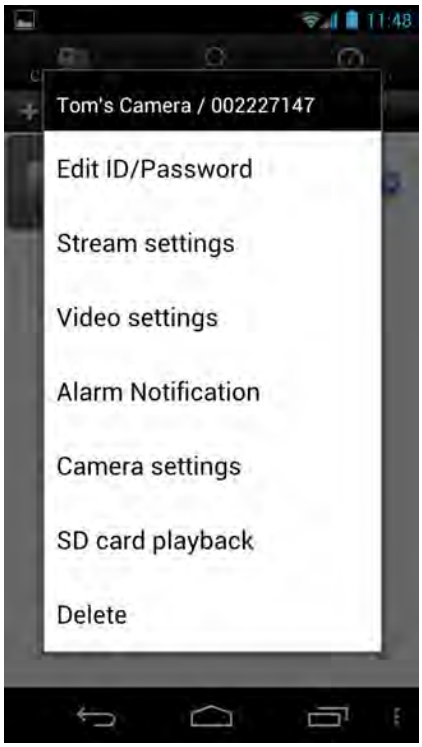
# 7.4 USING CAMERA LIST TO EDIT CAMERA SETTINGS

You can use the Camera List to adjust the connection or other settings for your camera.

**To access Camera Settings:**

- Tap Camera List 

. Then tap  next to the camera you would like to edit.The Camera List Settings Menu appears.




Camera List Settings Screen

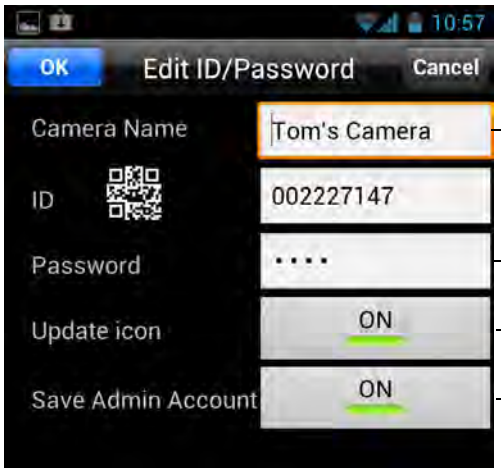
**NOTE:** For certain menus, you will need to enter the camera admin user name and password before you may change settings. By default, the admin user name is **admin** and the password is **left blank**.

## 7.4.1 EDITING CAMERA CONNECTION SETTINGS

You can edit your camera connection information. This is useful if you change the password of the camera or if you want to save the admin user name and password, so you don't have to enter it to make settings changes.

**To edit camera connection settings:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Edit ID/Password**.




Edit Camera Name

Edit Password

Enable/disable icon automatic icon updates

Enable/disable saving admin user name and password next time entered

3. Edit the **Camera Name** and **Password** as needed.
4. Under **Update icon**, select **ON** for the camera to update the icon shown in Camera List every time you connect to it or **OFF** for the icon to remain as is.
5. Under **Save Admin Account**, select **ON** to save the admin user name and password, so you do not have to enter it when making setting changes. Or, select **OFF** to not save the admin user name and password. The admin user name and password will be saved the next time you enter it to make a setting change.
6. Tap **OK** to save changes.

## 7.4.2 DELETING CAMERAS FROM CAMERA LIST

1. In Camera List, tap  next to the camera you would like to delete.
2. Tap **Delete**.

## 7.4.3 EDITING CAMERA MOBILE STREAMING SETTINGS

Configure the camera image quality settings for streaming to mobile devices (i.e. smart phones and tablets). Please note that less bandwidth is generally available over mobile networks than over WiFi or Ethernet.



**To edit mobile streaming settings:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Stream Settings**.


— Select Mobile Bandwidth

— Enable/disable auto resolution and frame rate adjustement

— Select Resolution

— Select Frame rate

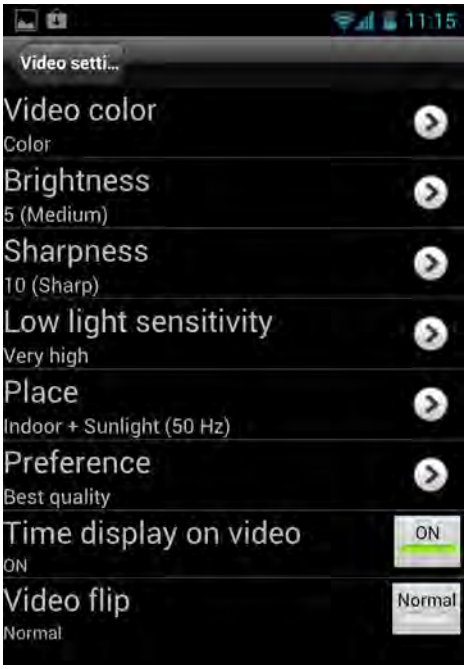
— Enable/disable audio streaming to Android™ device

3. Under **Bandwidth**, select the bandwidth for your mobile connection. If you are mainly connecting using WiFi, you may set this setting higher.
4. Under **Auto**, tap to select **ON** to have the camera automatically select the resolution and frame rate based on available bandwidth. Or, select **OFF** to manually select the resolution and frame rate. If you select **OFF**, configure the following:
   - Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240**, **480x360**, **640x400**, or **1024x768**.
   - Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
5. Under **Microphone**, tap to select **OFF** to turn off audio streaming to your mobile device or tap to select **ON** to turn on audio streaming to your mobile device.
6. Tap **Update** to save your settings.

## 7.4.4 EDITING CAMERA VIDEO SETTINGS

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Video Settings**. Then tap **Video**.




3. Configure the following:
   - **Video color:** Select **Color** to view the camera in color or select **Black & white**.
   - **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest).
   - **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest).
   - **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).
   - **Place:** Select **Outdoor video** for well lit environments. Select **Indoor Video** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor video + sunlight** if the picture is too bright on the Indoor Video setting. If you select an indoor settings, select **60Hz light freq** or **50Hz light freq** to adjust the camera for the frequency of your indoor lighting.
   - **Favor/Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.

- **Time Display on Video:** Tap to select **ON** to enable time stamps on video or **OFF** to disable time stamps.
- **Video flip:** Tap to select **Video Flip** to flip the camera image vertically and horizontally or select **Normal** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.

4. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

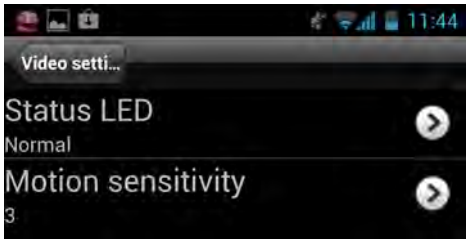


## *7.4.5 CONFIGURING LED CONTROL AND MOTION DETECTION SENSITIVITY*

Configure the behavior of the camera's status LED's. This is useful if you want the camera to be harder to spot at night. You can also configure the sensitivity for video motion detection.

**To configure LED's and motion detection sensitivity:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Video Settings**. Then tap **Control**.




— Select status LED behavior

— Select Video motion detection sensitivity

3. Under **Status LED**, select one of the following:
   - **Normal:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
   - **Always turn off:** LED's are turned off at all times.
   - **Turn off after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
4. Under **Motion Sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

**NOTE:** This setting does not affect the PIR motion detector.

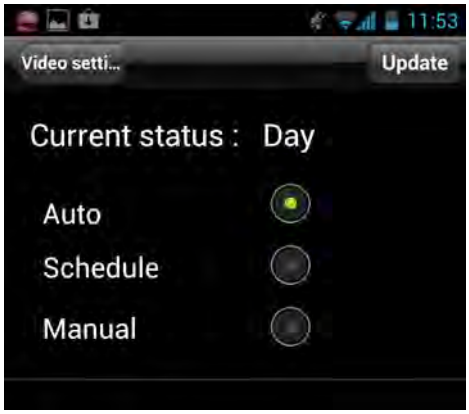
5. Tap **Video Settings** when finished making changes, then tap **Update** to save your settings.

## *7.4.6 CONFIGURING NIGHT MODE SETTINGS*

Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.

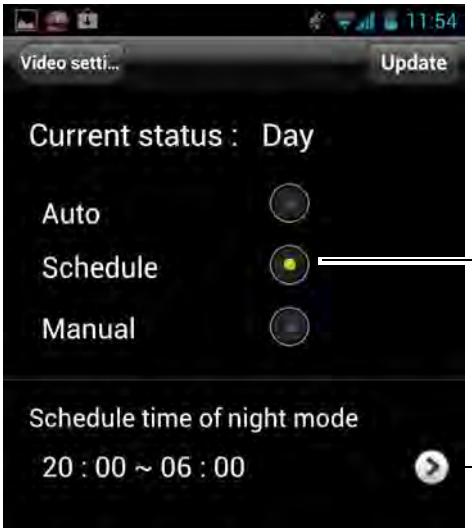
**To configure Day/Night mode:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Video Settings**. Then tap **Night Mode Control**.




Select Night Mode control option

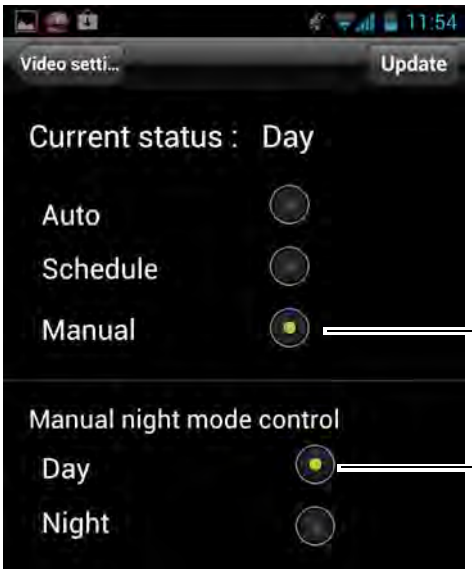
3. Select one of the following:
   - **Auto:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
   - **Schedule:** Camera will switch between day mode and night mode at scheduled times each day. If using this option, tap under **Schedule time of night mode**, use the sliders to set the **Start** time (when night mode begins each day) and **End** time (when night mode ends each day), then tap **OK**.




Select Schedule to schedule day/night mode switch

Tap to configure day/ night mode schedule.

- **Manual:** Manually select day mode or night mode. If using this option, select **Day** for day mode or **Night** for night mode.




Select Manual for manual day/night mode selection

Select Day mode or Night mode

4. Tap **Update** to save your changes.

## *7.4.7 ENABLING MOTION/SOUND PUSH ALARM NOTIFICATIONS*

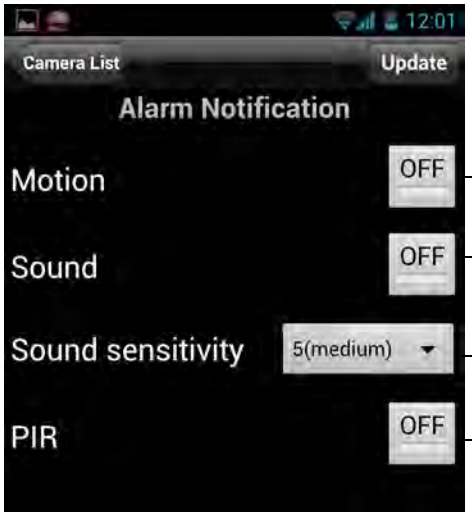
Push Alarm Notifications can be set up to create a notification straight to your Android™ device when motion or sound is detected by the camera. Push Alarm Notifications go directly to the notifications area on your device.


Push notification sent to device notifications list

**To enable Push Alarm Notifications:**

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Alarm Notification**.




Enable/disable push notifications for video motion detection

Enable/disable push notifications for sound

Select sensitivity for sound push notifications

Enable/disable push notifications for PIR motion detection

3. Under **Motion**, tap to select **ON** to enable Push Alarm Notifications when motion is detected using video motion detection or **OFF** to disable.
4. Under **PIR**, tap to select **ON** to enable Push Alarm Notifications when motion is detected using the PIR motion sensor or **OFF** to disable.
5. Under **Sound**, tap to select **ON** to enable Push Alarm Notifications when sound is detected by the camera or **OFF** to disable. Under **Sound Sensitivity**, select a sensitivity for Sound Push Alarm Notifications between **1** (lowest) and **10** (highest).
6. Tap **Update** to save your settings.

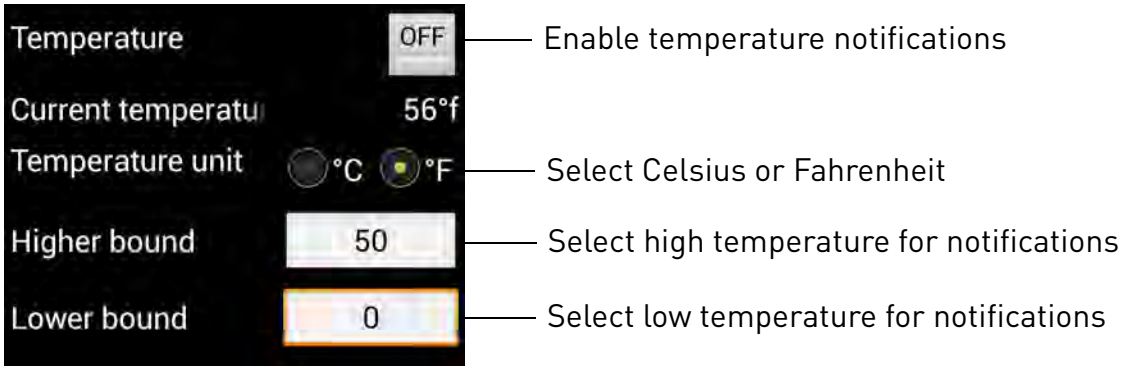
## *7.4.8 CONFIGURING TEMPERATURE PUSH NOTIFICATIONS AND TEMPERATURE UNITS (FAHRENHEIT OR CELSIUS)*

Temperature Push Notifications can be set up to send you alerts if the temperature near the camera goes higher or lower than the specified values. You can also select the temperature unit that will be used by the system.

**To configure temperature push notifications:**

1. In Camera List, tap  next to the camera you would like to edit.

2. Tap **Alarm Notification**.




3. Under **Temperature**, select **ON** to enable temperature push notifications.
4. Under **Temperature unit**, select **°C** or **°F**.
5. Under **Higher bound**, select the high temperature value. You will receive a notification if the temperature near the camera goes above this value.
6. Under **Lower bound**, select the low temperature value. You will receive a notification if the temperature near the camera goes above this value.
7. Tap **Update** to save your settings.

## *7.4.9 EDITING CAMERA WIRED NETWORK SETTINGS*

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.

**To edit camera wired network settings:**

1. In Camera List, tap next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Network** then **Wired Network**.


Select DHCP (recommended) or Static for a fixed IP address

If Static, configure IP address information as needed

4. Select **DHCP** (recommended) to allow the camera to automatically obtain an IP address from the router or **Static** to use fixed IP address settings. If you select Static, configure your **IP Address**, **Subnet mask**, **Default gateway**, **DNS1**, and **DNS2**.
5. Tap **Update** to save your settings.

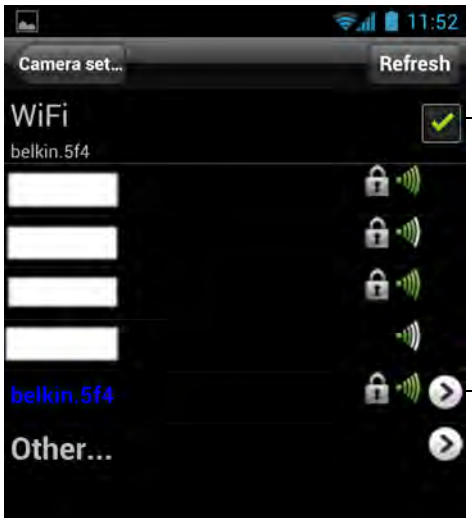
## *7.4.10 EDITING CAMERA WIFI NETWORK SETTINGS*

Configure WiFi network settings for the camera.

**To edit camera WiFi settings:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

3. Tap **Network** then **WiFi Network**.




4. Check WiFi to enable WiFi on the camera and scan for available networks.
5. Tap a WiFi network and enter the password to connect.
   - To connect to a hidden WiFi network, tap **Other**. Enter the **SSID**, select the security type, and tap **Add**. Tap the network name from the list and enter the password.
6. Wait for the update to complete.
7. Remove the Ethernet cable from the camera. It will connect to the WiFi network. When it is connected, the blue Network LED will be on or flashing.
8. Press **Camera Settings** then **Camera List** to exit the edit camera screen.
9. Tap the camera in the Camera List to connect. If you cannot connect, check to make sure you have entered the correct wireless password and that the camera is in signal range of your wireless router.

## *7.4.11 ENABLING EMAIL NOTIFICATIONS*

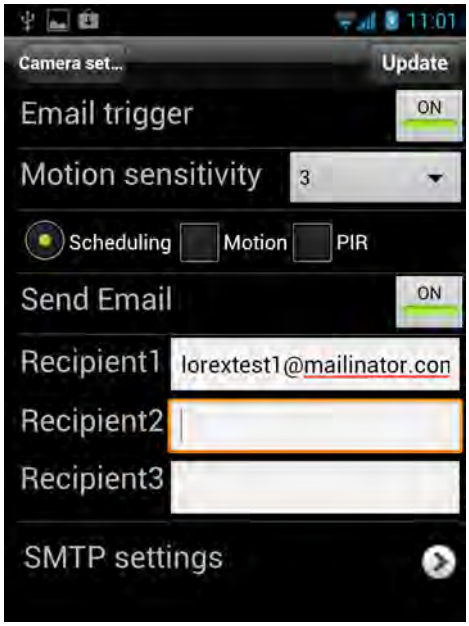
Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.

**To enable email notifications:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.

English

3. Tap **Schedule** then **Email Alarm**.




— Enable/disable email notifications
— Select motion sensitivity for video motion
— Select email triggers
— Enable/disable email notifications
— Enter recipient email addresses

4. Under **Email trigger**, tap to select **ON** to enable email notifications or **OFF** to disable. Then under **Send Email**, tap to select **ON** to enable email notifications.
5. Under **Motion sensitivity**, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

**NOTE:** This setting does not affect the PIR motion detector.

6. Select from the following trigger options for email alarms:
   - **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
   - **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

   - **Scheduling:** Send email alarms based on the settings configured under Schedule.
7. Enter up to 3 email addresses under **Recipient1~3** that will receive email alarms.
8. Tap **Update** to save your changes.

**NOTE:** If you want to use a custom SMTP server to send Email messages, click **SMTP Settings**, enter your SMTP server information, and tap **OK**.

## *7.4.12 ENABLING SPEAKER ALARMS*

Configure the siren. The siren can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.



**To configure speaker alarms:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Schedule** then **Speaker Alarm**.


Enable/disable speaker alarms

Select number of times speaker alarm will repeat

Select speaker alarm triggers

Test speaker alarm

4. Under **Speaker Alarm Trigger**, tap to select **ON** to enable speaker alarms or **OFF** to disable.
5. Under **Alarm Loop Times**, select the number of times you would like the speaker alarm to repeat when alarms occur.
6. Select from the following speaker alarm triggers:
   - **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
   - **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Scheduling:** Create audio alarms based on the settings set in the Schedule.

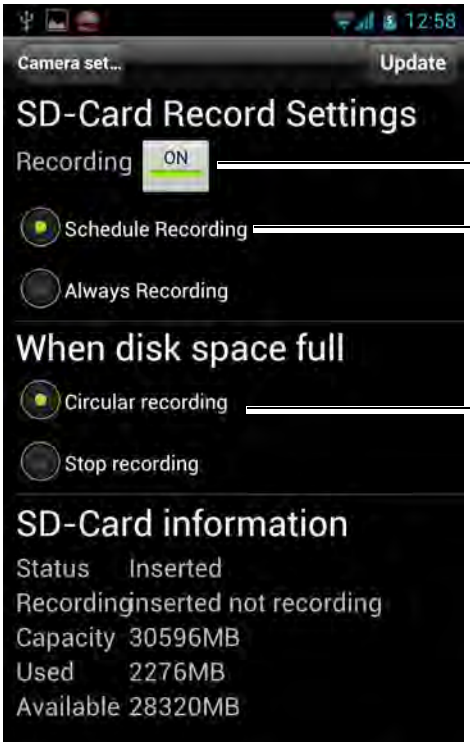
7. Tap **Alarm Test** to sound a test alarm.
8. Tap **Update** to save your settings.

## *7.4.13 ENABLING MICROSD RECORDING*

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone®, iPad®, or Android™ apps.

**To configure microSD card recording:**

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **SD-Card**.




5. Under **Recording**, tap to select **ON** to enable microSD recording or **OFF** to disable.
6. Select one of the following recording options:

- **Always Recording:** Camera will record continuously at all times.
- **Schedule Recording:** Camera will record according to settings set in the recording schedule.

**NOTE:** To enable Motion detection recording using Android™, you must use Schedule recording. Then, create a schedule in the Scheduling menu with **Motion trigger**, **PIR trigger**, or both Motion trigger and PIR trigger selected.

7. Under **When disk space full**, select **Circular** recording to set the camera to overwrite the oldest recordings when the microSD card is full or select **Stop recording** to set the camera to stop recording when the microSD card is full.
8. Tap **Update** to save your settings.

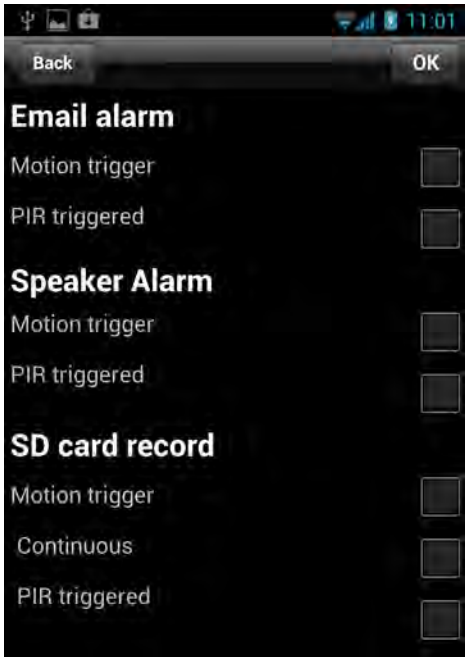


## *7.4.14 CONFIGURING THE RECORDING AND ALARM SCHEDULE*

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.

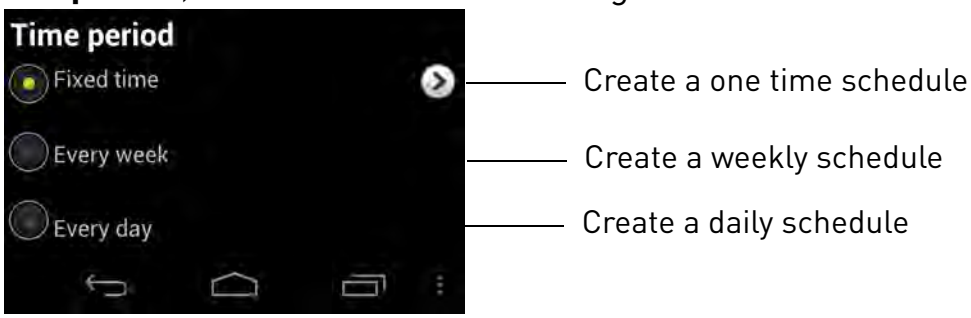
**To create a schedule for alarms or recording:**

1. First, you must enable alarms or recording to use the schedule.
2. In Camera List, tap  next to the camera you would like to edit.
3. Tap **Camera Settings**.
4. Tap **Schedule** then **Scheduling**.
5. Tap **Add Schedule**.




Select alarm and recording types for the schedule

6. Under **Email Alarm**, check **Motion trigger** to send an email alarm based on video motion, select **PIR trigger** to use the PIR motion sensor, or select both.
7. Under **Speaker Alarm**, check **Motion trigger** to create an speaker alarm based on video motion, check **PIR trigger** to use the PIR motion sensor, or select both.
8. Under **SD card record**, check **Continuous** for the camera to record to microSD continuously during the scheduled time. Check **Motion trigger** to record when video motion is triggered during the scheduled time, select **PIR trigger** to record when the PIR motion sensor is triggered during the scheduled time, or select both.
9. Under **Time period**, select one of the following:

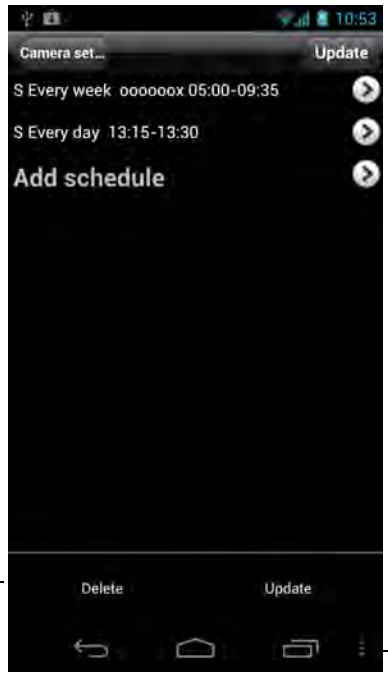



- **Every week:** Create a weekly recording schedule. Tap  and check the days you would like the schedule to apply to. Tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
- **Every day:** Create a daily recording schedule. Tap  then tap **Start** and **End** and use the sliders to configure the start and end time for the schedule. Tap **OK**.
- **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Tap **Start** and **End** and use the sliders to configure the exact date and time when you would like the schedule to start and end. Tap **OK**.

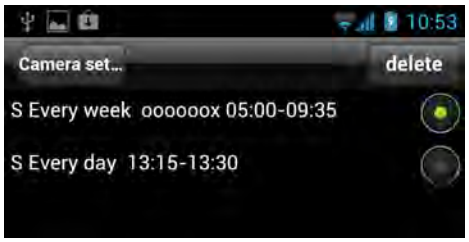
10. Tap **OK** to save the schedule. Tap **Update** to save your settings.

**To delete a Schedule:**

1. From the Scheduling menu, press the Android™ menu button and tap **Delete**.




2. Select the schedule you want to delete and tap **Delete**.




3. Tap **Update** to save your changes.

## *7.4.15 CONFIGURING THE CAMERA DATE AND TIME*

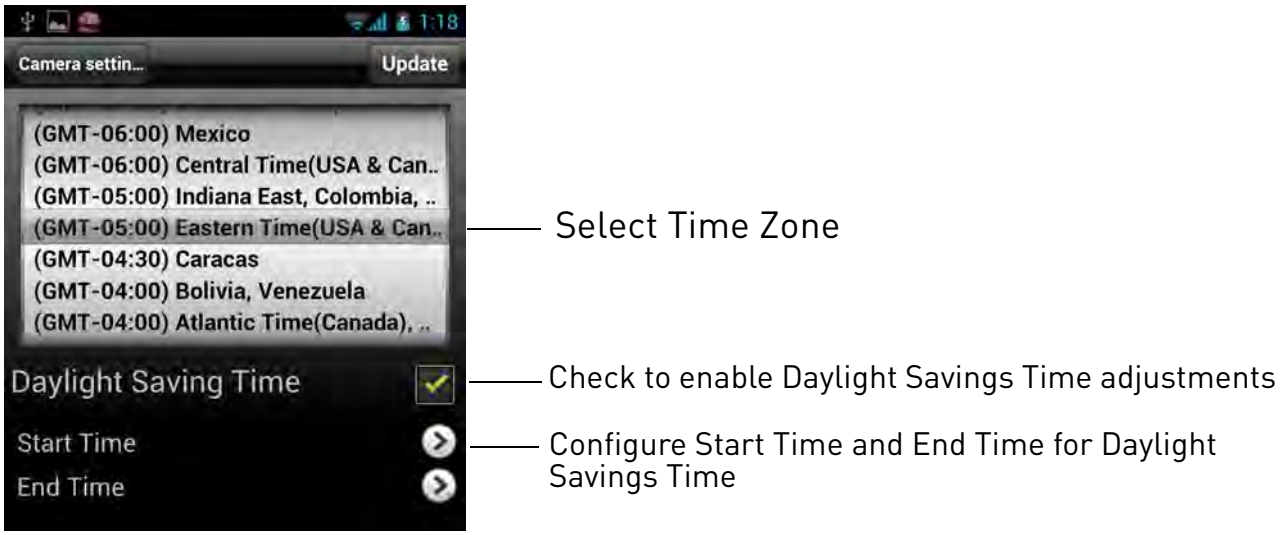
Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.

**To set the camera date and time:**

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Date/Time**.

4. Tap **Time Zone**.


5. Use the slider to select your time zone.
6. If your region observes Daylight Savings Time, check **Daylight Savings Time**. Tap **Start Time** and **End Time**, use the sliders to configure the start and end time for Daylight Savings Time and then tap **OK**.




7. Tap **Update** to save your changes.

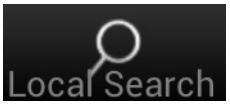
## *7.4.16 REBOOTING THE CAMERA*

1. In Camera List, tap  next to the camera you would like to edit.
2. Tap **Camera Settings**.
3. Tap **Admin** then **Reboot**.
4. Tap **OK** to confirm.

# 7.5 USING LOCAL SEARCH TO ADD CAMERAS

You can use the Local Search Menu to automatically add the ID's for cameras on your local network.

**To add cameras using local search:**

1. Tap the Local Search button ( 

).


2. Lorex Ping automatically scans for cameras on your local network. Tap **Search** to re-scan.
3. Tap a camera from the list. The Add camera screen comes on with the camera ID already entered.
4. Enter a **Camera Name** of your choice and enter the camera **Password**. If you have not connected to your camera before, the password is **lorex**.
5. Tap **OK**. The camera is now added to camera list. Tap the camera name in camera list to connect to the camera.

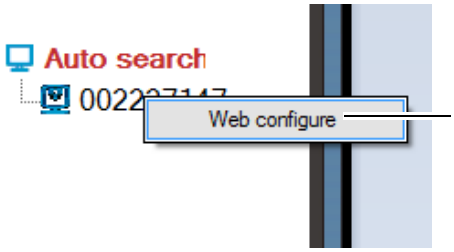
English

# 8. CONFIGURING CAMERA SETTINGS USING A WEB BROWSER

Web Configure lets you modify camera settings using a web browser.

**To access Web Configure:**

1. Open L-View, right-click on the camera ID under Auto Search, and click **Web configure**.



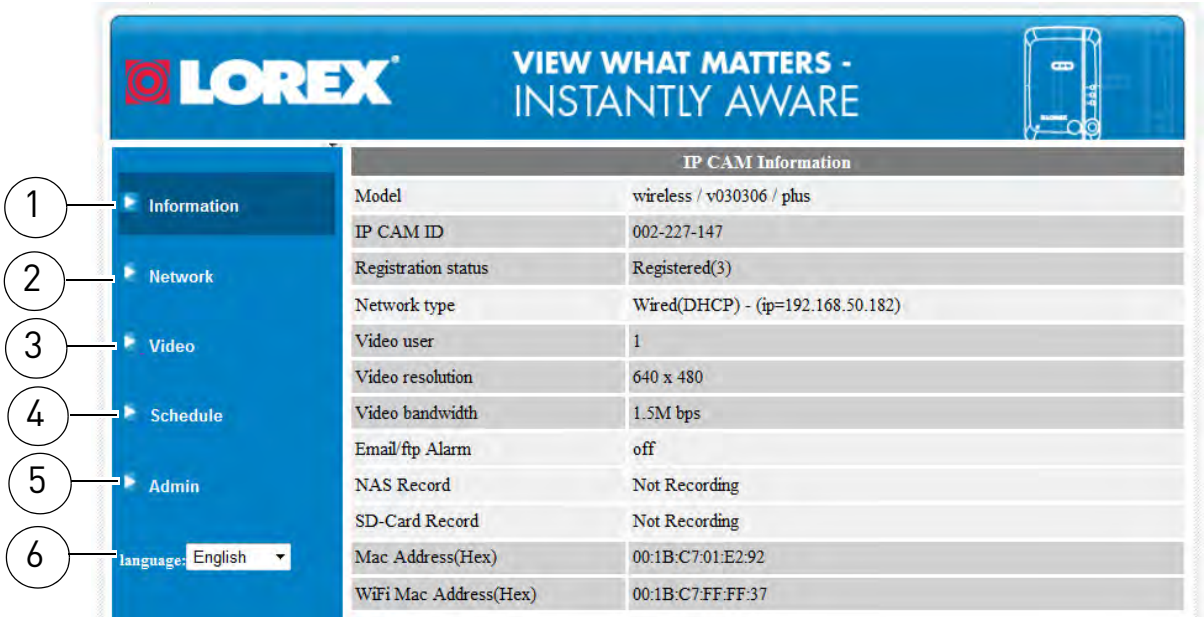

Right-click the camera under Auto Search and click Web Configure

**NOTE:** Your computer must be on the same network as the camera to use Web Configure. You may change camera settings over the Internet using the iPhone®, iPad®, or Android™ apps.

2. Enter the camera admin user name and password. By default, the admin user name is **admin** and the admin password field is **left blank**. Click **Log in**. The Web Configure interface opens in your default web browser.

**NOTE:** Your camera admin user name and password differs from the password used to connect to your camera to view video.

# 8.1 WEB CONFIGURE OVERVIEW



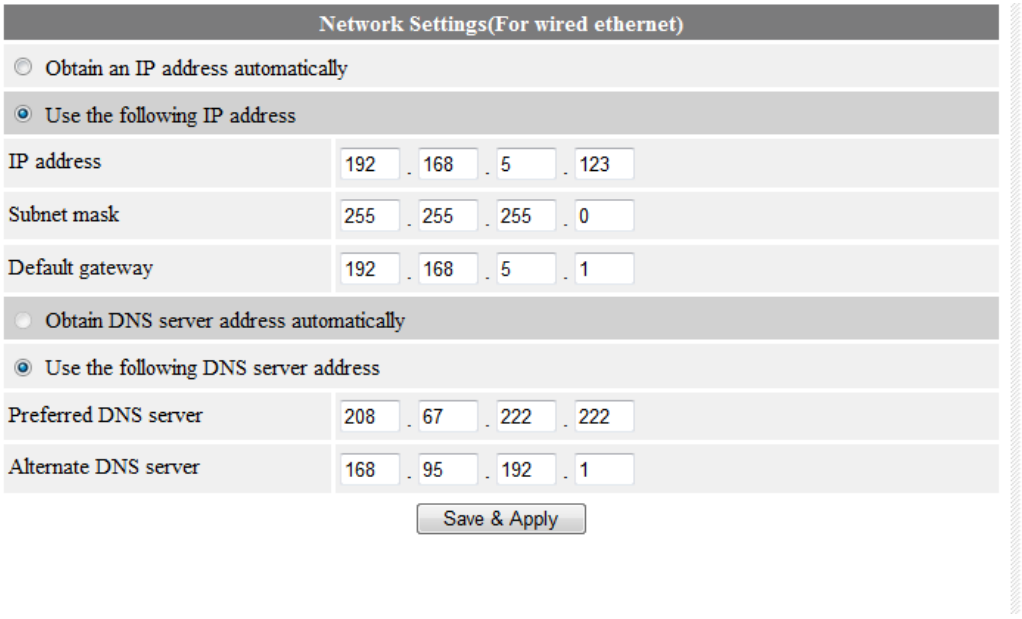

1. **Information:** View information about the camera and camera settings.
2. **Network:** Configure wired/wireless network settings. Connect to a wireless network.
3. **Video:** Configure camera video and streaming settings.
4. **Schedule:** Configure recording settings and schedules. Configure email and audio alarms.
5. **Admin:** Configure the camera date and time, passwords, and LED's. Restart the camera. Perform system upgrades.
6. **Language:** Select the language for the Web Configure interface.

# 8.2 NETWORK

Configure networking settings for WiFi or Ethernet connection.

## *8.2.1 WIRED NETWORK (DHCP OR FIXED IP)*

Configure the camera IP address when connected using Ethernet. Select DHCP or Fixed IP.




**To configure the camera to use DHCP or fixed IP:**

1. Select one of the following:
   - **Obtain an IP address automatically (recommended):** Use DHCP and allow the camera to obtain an IP address from the router automatically.
   - **Use the following IP address:** Use a fixed IP address and manually enter the IP address information.
2. If you selected Use the following IP address, configure the following:
   - **IP address:** Enter the IP address the camera will use. Make sure it is available on your network.
   - **Subnet mask:** Enter the Subnet Mask.
   - **Default Gateway:** Enter the Default Gateway address.
   - **Obtain DNS server address automatically:** Select to have the camera automatically select a DNS server.

- **Use the following DNS server address:** Select and then manually enter DNS server information.

3. Click **Save & Apply**.

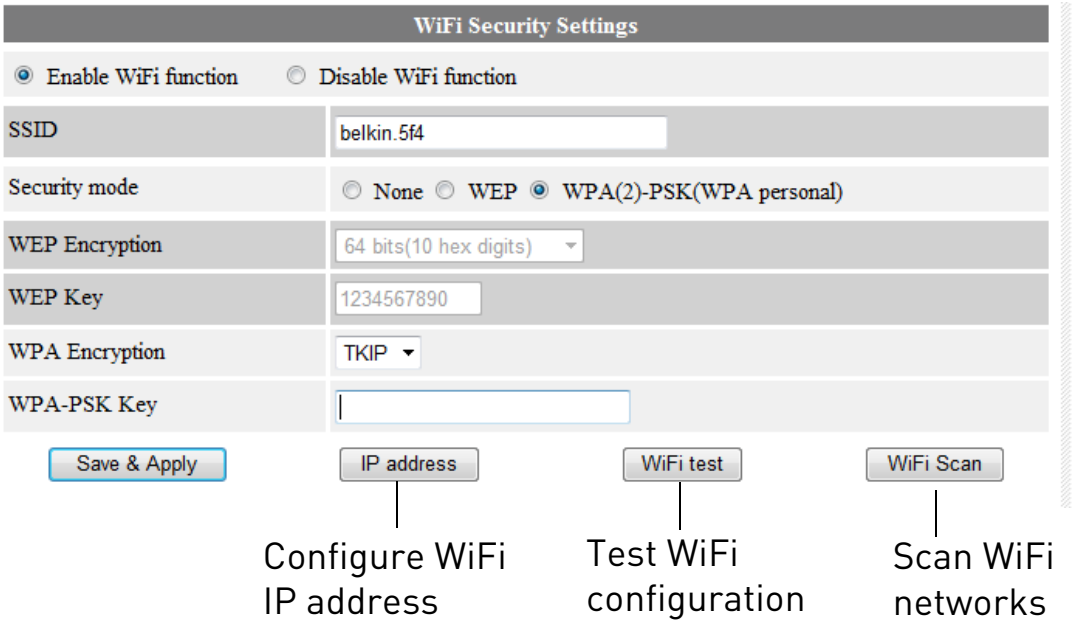
## *8.2.2 WIFI SECURITY (CONFIGURING WIFI SETTINGS)*

Configure the camera to connect to a WiFi network and configure WiFi settings.

**To configure WiFi Settings:**

**NOTE:** For instructions on connecting your camera to a WiFi network, see "PC WiFi Setup" on page 31 or see "Mac WiFi Setup" on page 39.

1. Perform one of the following:



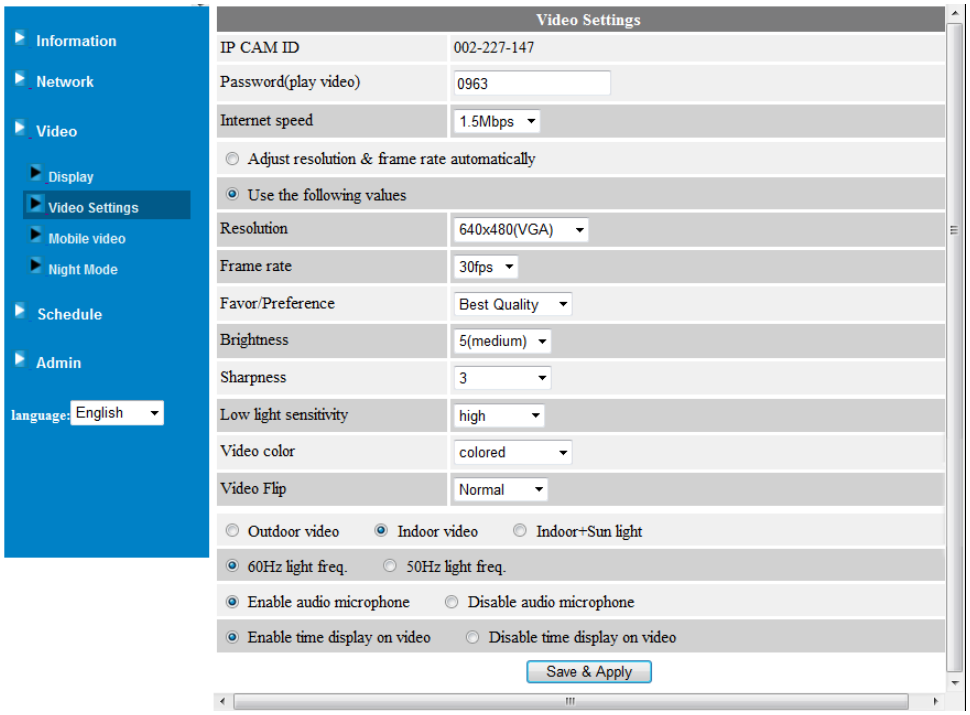

- To Scan available WiFi networks, click **WiFi Scan**.
- To connect to a hidden WiFi network, select **Enable Wifi function**, and manually fill out the **SSID**, **Security mode** (i.e. encryption type), and the **WEP** or **WPA-PSK Key**. Click **Save & Apply**. Refresh the page and select **WiFi test**. When the test is successful, disconnect the camera from Ethernet.
- To configure a fixed IP address for the camera when connected over WiFi, click **IP address**, configure the settings as needed, and click **Save & Apply**.
- To test configured WiFi settings, click **WiFi test**.

# 8.3 VIDEO

Configure camera video and streaming settings.

## *8.3.1 VIDEO SETTINGS*

Adjust the video quality settings. Set the password to access camera video through L-View or apps.




**To set the camera password for accessing video through L-View or apps:**

1. **Under Password (play video),** enter a password to access the camera video using L-View or smart phone and tablet apps.
2. Click **Save & Apply** to save the new password.

**To configure camera video quality settings:**

**TIP:** Change only one camera image quality setting at a time before clicking **Save & Apply** so you can judge the effects.

1. Configure the following, as needed:
   - **Internet speed:** Select the upload speed of your Internet connection. If your Internet connection is faster than 1.5Mbps, select 1.5Mbps.

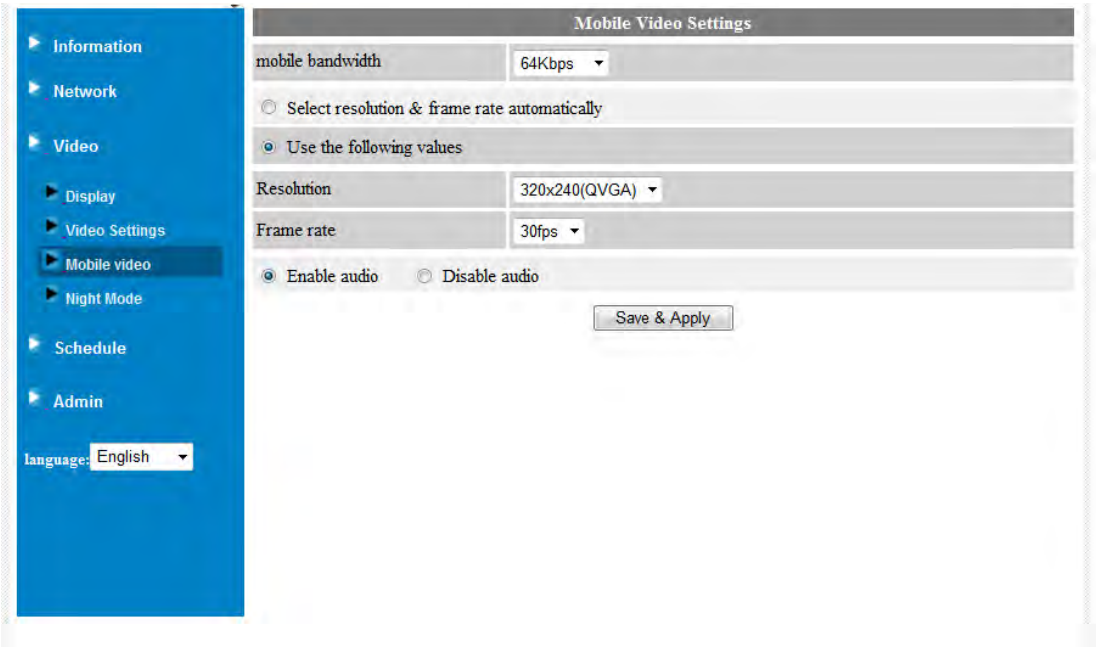
- **Adjust resolution and frame rate automatically:** Select to allow the camera to adjust the video resolution and frame rate based on available bandwidth.
- **Use the following values:** Select to manually select the video resolution and frame rate for the camera. Note that the image quality may decrease if there is not enough bandwidth for your selected settings.
- **Resolution:** Manually select either **320x240**, **640x480**, **1024x768**, or **1280x800** resolution. Higher resolution will give you a better, more detailed picture, but requires more bandwidth. Lower resolution allows the camera to maintain a higher frame rate when available bandwidth is low.
- **Frame rate:** Manually select the frame rate between **30fps** (highest) and **1fps** (lowest). 30fps is real time video, meaning that movement in the image will appear smooth, with no choppiness.
- **Favor/Preference:** Select whether you would like the camera to reduce the image quality or the frame rate when bandwidth increases or decreases. Select **Video Motion** to have the camera maintain the frame rate and reduce image quality when bandwidth is insufficient. Select **Image Quality** to have the camera maintain image quality and reduce frame rate when bandwidth is insufficient. Select **Better Quality** to have the camera maintain frame rate and increase quality when bandwidth is sufficient. Select **Best Quality** to have the camera maintain the frame rate and increase quality to the maximum speed of the connection.
- **Brightness:** Manually adjust the brightness of the image between **10** (highest) and **1** (lowest).
- **Sharpness:** Manually adjust the sharpness of the image between **10** (highest) and **1** (lowest).
- **Low Light Sensitivity:** Set the camera's sensitivity in low light environments between **Very High** (highest), **High**, and **Normal** (lowest).
- **Video color:** Select **Colored** to view the camera in color or select **Black & white**.
- **Video flip:** Select **Video Flip** to flip the camera image vertically and horizontally or select **Normal** for the normal orientation. This is useful if the camera has been mounted to a wall or ceiling upside down.
- **Outdoor video/Indoor video/Indoor video + sun light:** Select **Outdoor video** for well lit environments. Select **Indoor Video** if you notice strip lines in the image or if the picture is too dark on the Outdoor video setting. Select **Indoor video + sunlight** if the picture is too bright on the Indoor Video setting.

- **60Hz light freq/50Hz light freq:** If necessary, select **60Hz light freq** or **50Hz light freq** to adjust the camera for the frequency of your indoor lighting. These settings are not available when the camera is set to Oudoor video.
- **Enable audio microphone/Disable audio microphone:** Select **Disable audio microphone** to disable the built-in microphone in the camera or select **Enable audio microphone** to enable it.
- **Enable time display/Disable time display:** Select **Disable time display** to turn off video time stamps or **Enable time display** to turn on video time stamps.

2. Click **Save & Apply** to apply the settings to the camera. You may need to reconnect to the camera after making settings changes.

## *8.3.2 MOBILE VIDEO*

Set streaming settings for connecting using a smart phone or tablet. Note that less bandwidth is generally available when connecting to the camera over a mobile cellular network than when connecting using broadband Internet.




**To configure mobile streaming settings:**

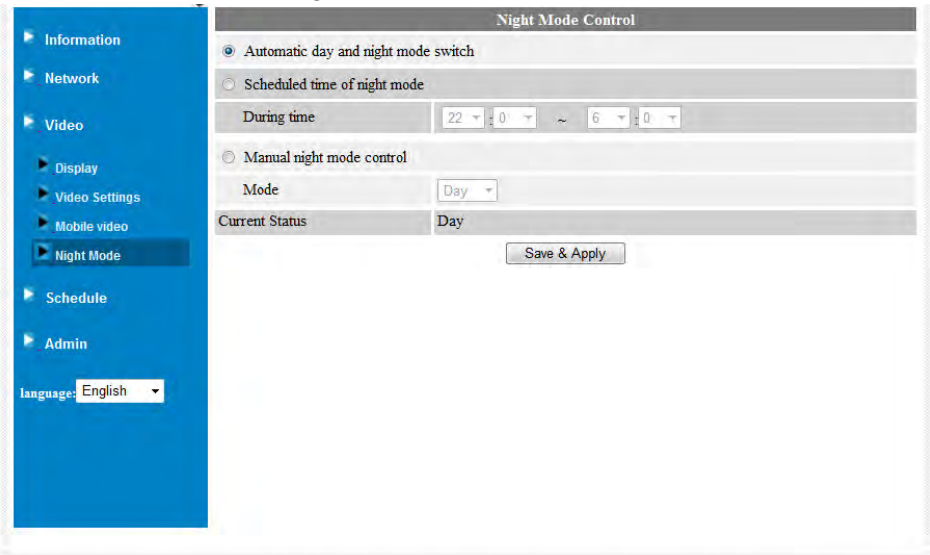
1. Under **Mobile bandwidth**, select your available mobile bandwidth. If you are primarily connecting using WiFi, you may set this setting higher.
2. Select either **Select resolution & frame rate automatically** to have the camera automatically select the resolution and frame rate based on available bandwidth or select **Use the following values** to manually select the resolution and frame rate.

3. Under **Resolution**, select the resolution that will be used when connecting to the camera using a smart phone or tablet: **320x240**, **480x360**, **640x400**, or **1024x768**.
4. Under **Frame rate**, select the frame rate that will be used when connecting to the camera using a smart phone or tablet between **30fps** (highest) and **1fps** (lowest).
5. Select **Enable audio** to enable audio streaming to smart phones and tablets or **Disable audio** to disable audio streaming to smart phones and tablets.
6. Click **Save & Apply** to apply changes to your camera.



## *8.3.3 NIGHT MODE*

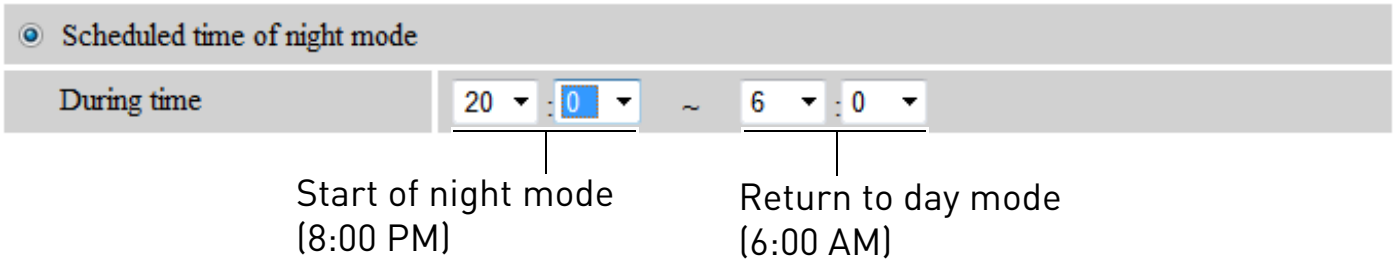
Configure when the camera uses day or night mode. When day mode is on, the camera sees in color. When night mode is on, the camera sees in black and white, and the Infrared LED turns on to enable night vision.



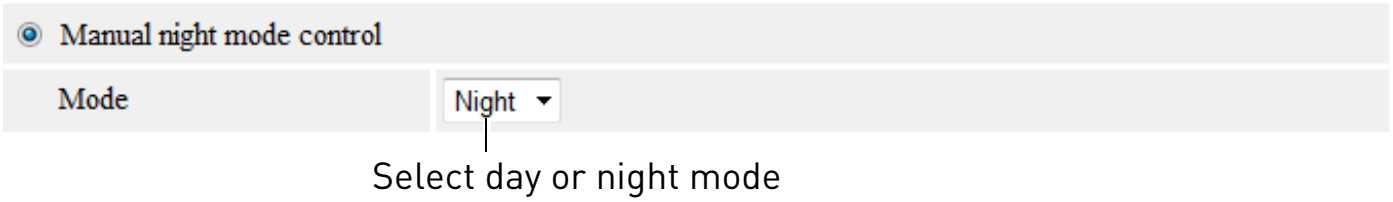

**To configure Day/Night mode:**

1. Select one of the following:
   - **Automatic day and night mode switch:** Camera will automatically switch between day mode or night mode, based on the amount of light in the room.
   - **Scheduled time of night mode:** Camera will switch between day mode and night mode at a scheduled times each day. If using this option, use the first set of drop-down menus to select (in 24-hour time) what time the camera will switch to night mode

and the second set of drop-down menus to select when the camera will return to day mode.




- **Manual night mode control:** Manually select day mode or night mode. If using this option, under **Mode**, select **Day** for day mode or **Night** for night mode.



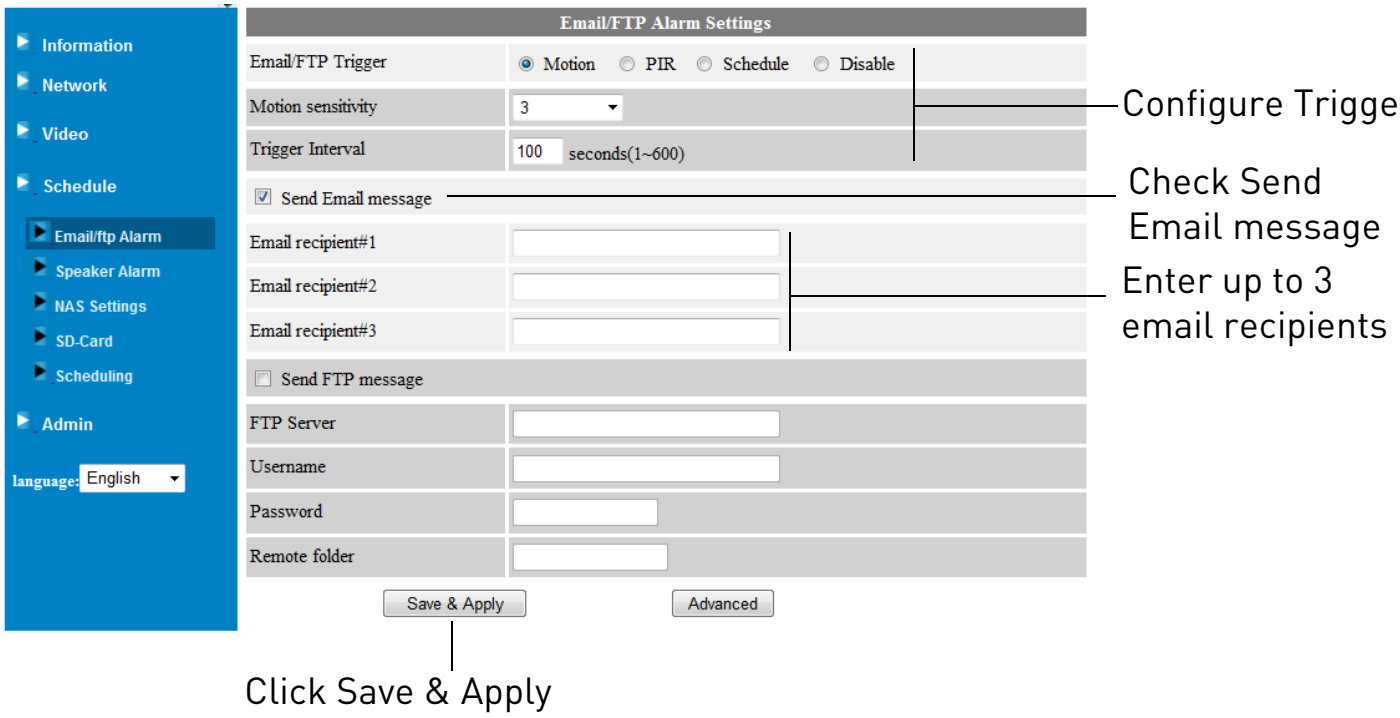

2. Click **Save & Apply** to apply your settings to the camera.

# 8.4 SCHEDULE

Configure recording to microSD card, configure email or speaker alarms, and setup the recording/alarm schedule.

## *8.4.1 EMAIL/FTP ALARM SETTINGS (CONFIGURING EMAIL ALARMS)*

Configure email alarms. The camera can be set up to send email alerts when motion is detected. Email alarms include a .jpg attachment.




**To configure Email Alarms:**

1. Under **Email/FTP Trigger**, select one of the following alarm triggers:
   - **Motion:** Use Video motion detection to trigger email alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
   - **PIR:** Use the PIR motion detector to trigger email alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

- **Schedule:** Send email alarms based on the settings configured under Schedule. see "Scheduling (Configuring Recording and Alarm Schedules)" on page 165.
- **Disable:** Disable email alarms.

2. If you have selected Motion, under Motion Sensitivity, select the motion detection sensitivity between **1** (High) and **10** (Low). If Motion Detection Sensitivity is set to 1, motion detection will be triggered if a moving object is larger than 1% of the video area. If it is set to 10, a moving object must be larger than 10% of the video area to trigger motion detection.

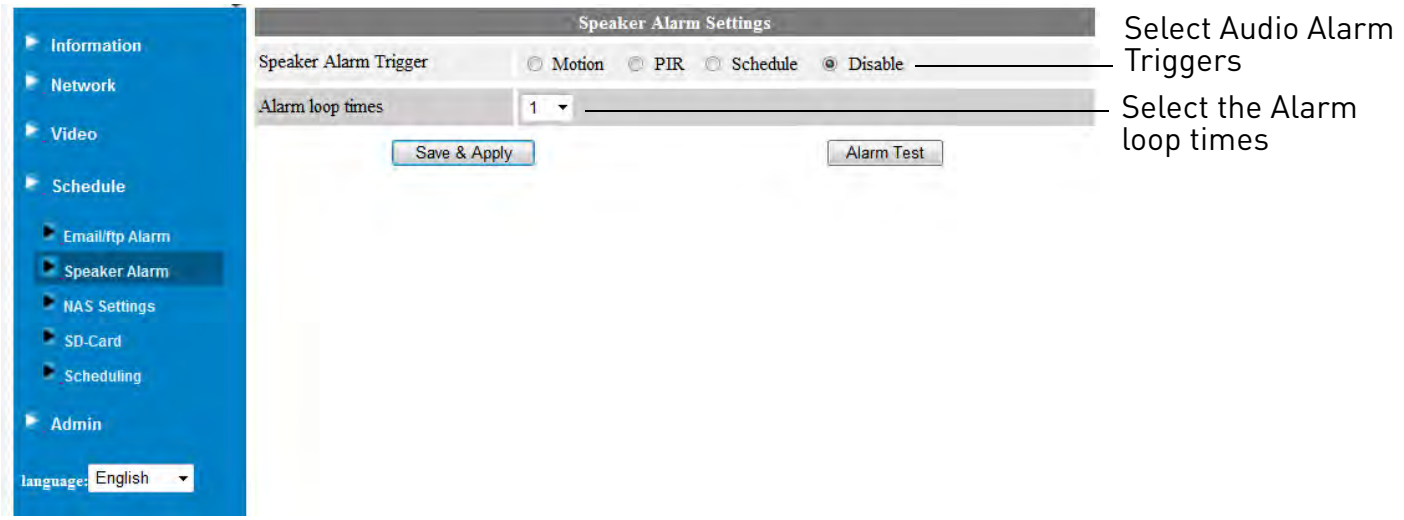
**NOTE:** This setting does not affect the PIR motion detector.

3. Under **Trigger Interval**, enter the minimum time (in seconds) the camera will wait in between email alarms. If this Interval is set too low, you may receive a lot of messages.
4. Under **Email Recipient**, enter up to 3 email addresses that will receive email alarms.
5. Click **Save & Apply** to save email alarm settings.

**NOTE:** If you want to use a custom SMTP server to send Email messages, click Advanced, enter your SMTP server information, and click Save & Apply.

## *8.4.2 SPEAKER ALARM (CONFIGURING AUDIO ALARMS)*

A siren can be set up to go off when the camera detects motion. This is helpful if you want to scare off intruders.






**To configure speaker alarms:**

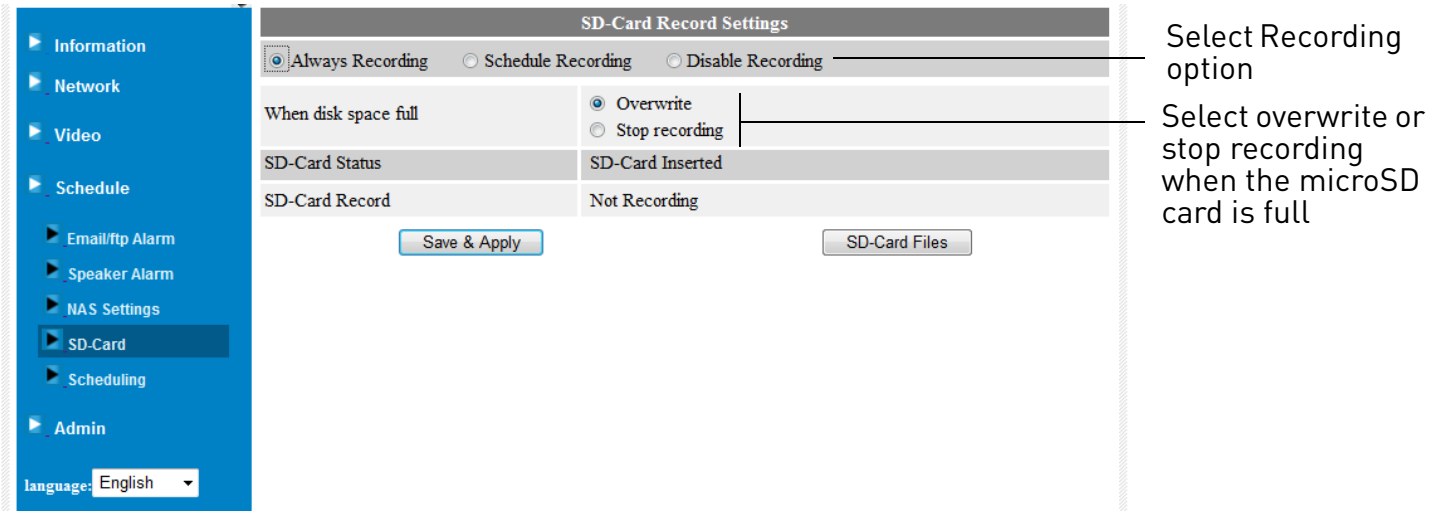
1. Under **Speaker Alarm Trigger**, select one of the following alarm triggers:
   - **Motion:** Use Video motion detection to trigger audio alarms. Video motion detection looks for movement in the image to determine if there is motion. This means that there may be false alarms caused by changes in lighting, trees moving in the wind, etc.
   - **PIR:** Use the PIR motion detector to trigger audio alarms. The PIR motion detector uses changes in temperatures (e.g. from a person moving around in front of the camera) to determine if there is motion. PIR motion detection is less effective at higher temperatures.

**NOTE:** You may also select both PIR and Motion to receive alarms from both motion triggers.

   - **Schedule:** Create audio alarms based on the settings set in the Schedule. see “Scheduling (Configuring Recording and Alarm Schedules)” on page 165.
   - **Disable:** Disable audio alarms.
2. Under **Alarm loop times**, select the number of times the alarm will repeat.
3. Click **Alarm Test** to sound a test alarm.
4. Click **Save & Apply**.

## *8.4.3 SD CARD (CONFIGURING MICROSD RECORDING)*

Configure video recording to the microSD card (required; not included). To playback recordings saved on the microSD card, use L-View or the iPhone®, iPad®, or Android™ apps.

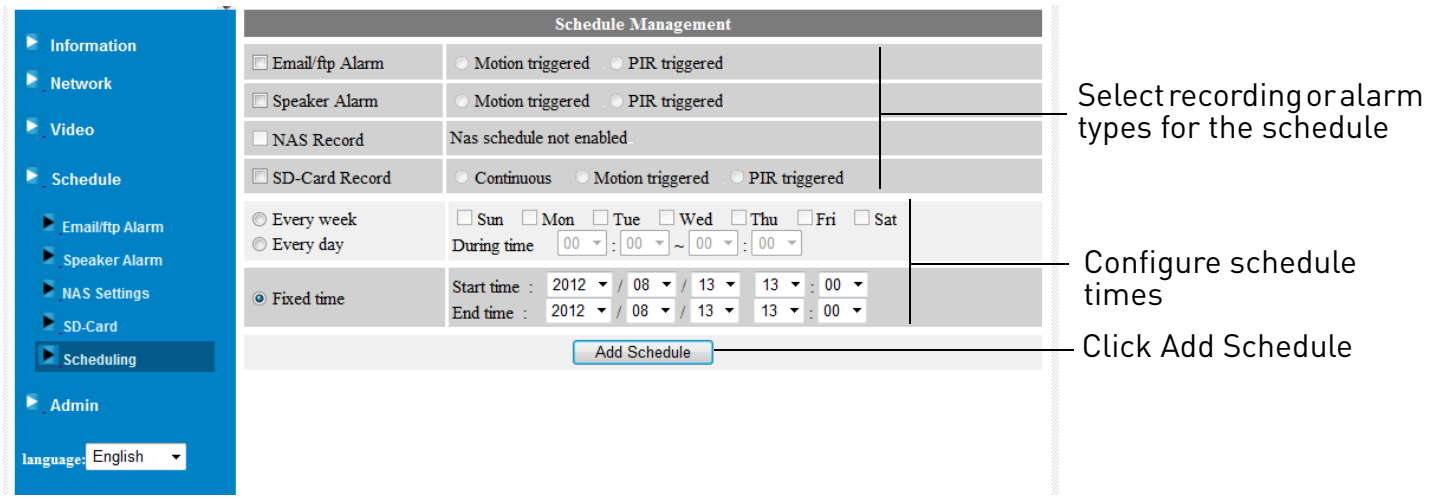



**To configure microSD card recording:**

1. Make sure a microSD card (not included) is inserted into the camera. It is recommended to format the microSD card before using it with the camera.
2. Select one of the following recording options:
   - **Always Recording:** Record continuously, all the time to microSD card.
   - **Schedule Recording:** Record according to the settings set in the Schedule.
   - **Disable Recording:** Do not record.
3. Under **When disk space full**, select **Overwrite** for the camera to record over the oldest recordings when the microSD card is full or select **Stop recording** for the camera to stop recording when the microSD card is full.
4. Click **Save & Apply**.

# *8.4.4 SCHEDULING (CONFIGURING RECORDING AND ALARM SCHEDULES)*

Configure schedules for recording and alarms. Schedules can be configured separately for alarms and recording. You can configure up to 12 schedules.




**To create a schedule for alarms or recording:**

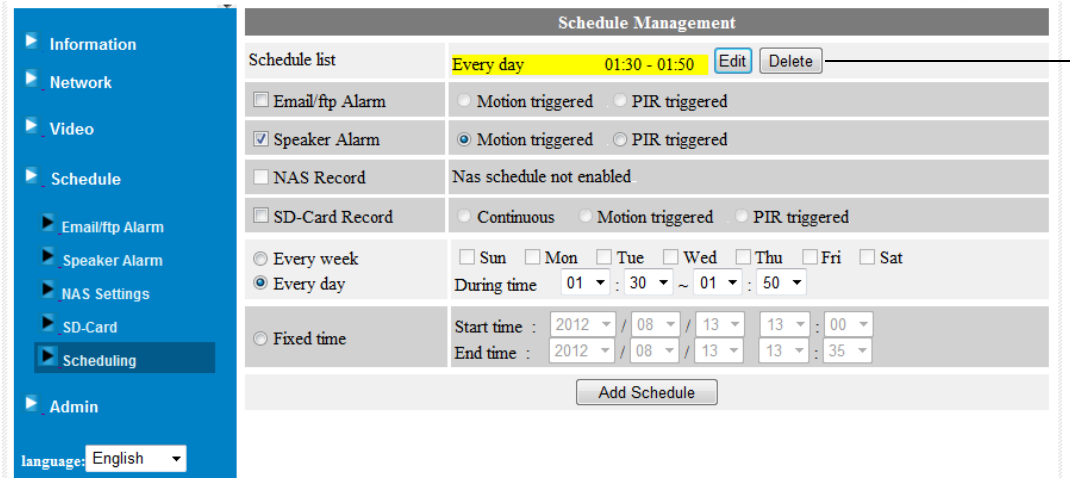
1. First, you must enable alarms or recording to use the schedule.
2. Check which alarm or recording types will use this schedule:
   - **Email/ftp Alarm:** Check to use this schedule for Email Alarms. Select **Motion triggered** to send an email alarm based on video motion, select **PIR triggered** to use the PIR motion sensor, or select both.
   - **Speaker Alarm:** Check to use this schedule for Email Alarms. Select **Motion triggered** to create an audio alarm based on video motion, select **PIR triggered** to use the PIR motion sensor, or select both.
   - **SD Card Recording:** Check to use this schedule for microSD recording. Select **Continuous** for the camera to record to microSD continuously during the scheduled time. Select **Motion triggered** to record when video motion is triggered during the scheduled time, select **PIR triggered** to record when the PIR motion sensor is triggered during the scheduled time, or select both.
3. Select one of the following to configure the times that will be used for this schedule:
   - **Every week:** Create a weekly recording schedule. Check the days you would like the schedule to apply to. Under **During time**, enter the start time for the schedule on the left and the end time for the schedule on the right.
   - **Every day:** Create a daily recording schedule. Under **During time**, enter the start time for the schedule on the left and the end time for the schedule on the right.

- **Fixed time:** Create a one time schedule (for example, if you are going on vacation, and would like to record all the time). Under **Start time**, enter the exact date and time when you would like the schedule to start and enter the **End time**.

4. Click **Add Schedule**.

**To delete a schedule:**

1. Existing schedules are shown at the top of the page. Click **Delete** next to the schedule you want to delete.




Click Delete to delete a schedule

**To edit a schedule:**

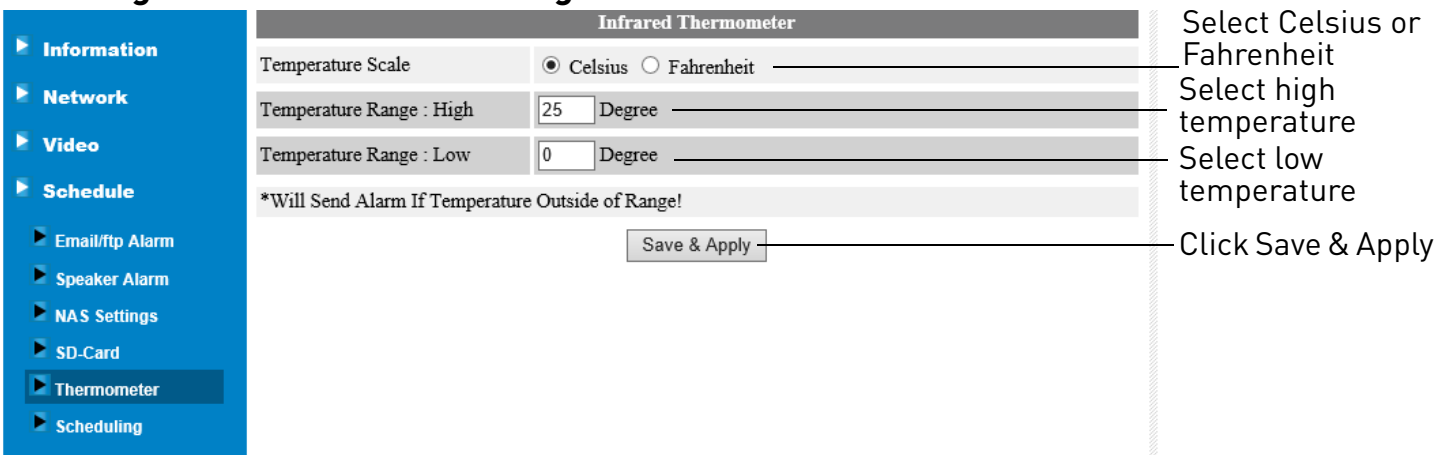
1. Click **Edit** next to the schedule you want to delete.
2. Edit the schedule settings as needed.
3. Click **Update Schedule**.

# 8.5 THERMOMETER

The Thermometer menu allows you to select the temperature units (Fahrenheit or Celsius) used in the camera display. It also allows you to configure the high and low temperatures that will trigger temperature push notifications.

**NOTE:** Temperature push notifications are only available on smartphones or tablets. You must enable temperature push notifications through the Alarm Notification menu in the Lorex Ping app to receive them on your device.

**To configure thermometer settings:**



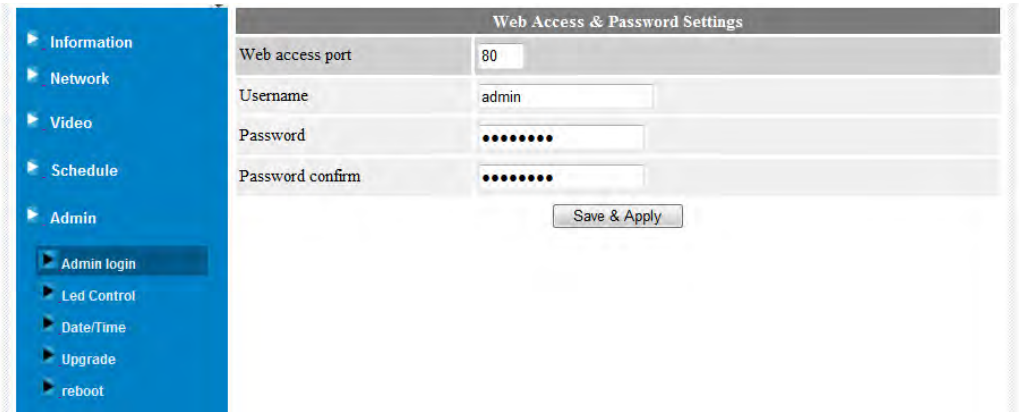

1. Under **Temperature Scale**, select **Celsius** or **Fahrenheit**.
2. Under **Temperature Range: High**, select the high temperature value that will trigger push notifications on phones and tablets.
3. Under **Temperature Range: Low**, select the low temperature value that will trigger push notifications on phones and tablets.
4. Click **Save & Apply**.

# 8.6 ADMIN

Configure the camera date and time, passwords, and LED's. Restart the camera. Perform system upgrades.

## *8.6.1 ADMIN LOGIN*

Configure the admin user name and password for the camera. The admin user name and password are used to login to Web Configure or change settings using apps. Configure the web access port.



**To configure the admin user name and password used to login to Web Configure:**

1. Under **Username**, enter the desired admin user name for the camera. The default is **admin**.
2. Under **Password**, enter the desired admin password for the camera. By default, the password field is left blank when logging in. Repeat the password under **Password confirm**.
3. Click **Save & Apply** to apply the settings to the camera. Restart the camera by disconnecting and reconnecting the power adapter or pressing the Reboot button (see "Reboot" on page 172).

**To configure the Web access port:**

For added security, you may change the camera's web access port. Please note that if you change the web access port, you must enter the camera's **IP address**, a **colon (:)**, and the **camera's web access port** when connecting to the camera's IP address on the local network (e.g. *192.168.0.101:80*).

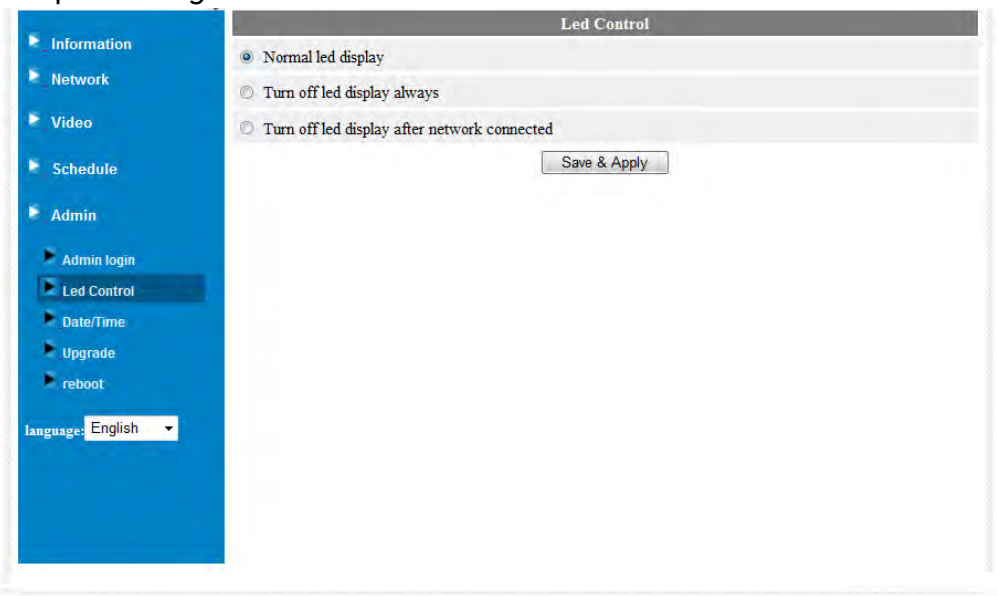
1. Under **Web access port**, enter the desired web access port. It must not be used by any other device on your network. Note that L-View will automatically update the web access port when connecting to Web Configure on the local network.
2. Click **Save & Apply**. Restart the camera by disconnecting and reconnecting the power adapter or pressing the Reboot button (see "Reboot" on page 172).

**NOTE:** Your computer must be on the same network as the camera to use Web Configure. You may change camera settings over the Internet using the iPhone®, iPad®, or Android™ apps.

## *8.6.2 LED CONTROL*

Configure the behavior of the camera status LED's. This is useful if you want the camera

to be harder to spot at night.

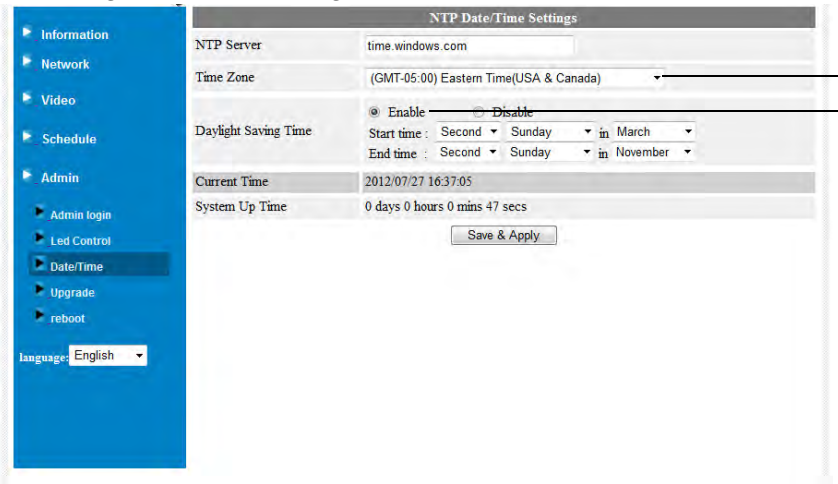



**To configure the LED's:**

1. Select one of the following:
   - **Normal LED display:** LED's will function as normal. For details on LED functions, see "Camera Overview" on page 1.
   - **Turn off LED display always:** LED's are turned off at all times.
   - **Turn off LED display after network connected:** LED's turn on when the camera is powered on and turn off once a network connection is made.
2. Click **Save & Apply** to apply settings to the camera.

## 8.6.3 DATE/TIME

Configure the camera date and time. The camera syncs with an Internet NTP time server to automatically provide the correct time, once you have configured your time zone and daylight savings time settings.




It is highly recommended to set the date and time when first setting up your system.

Inaccurate time stamps may render your footage unusable for court evidence.

**To set the camera date and time:**

1. Under **Time Zone**, select your time zone.
2. Select **Enable** under **Daylight Savings Time** if your region observes Daylight Savings Time. Configure the **Start Time** and **End Time** for Daylight Savings Time if needed.
3. Click **Save & Apply** to apply settings to the camera.

## 8.6.4 UPGRADE

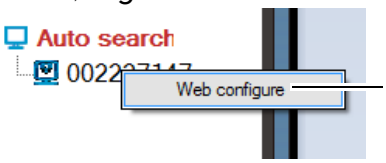
Upgrade the camera firmware. When firmware upgrades are released, they will be available as a free download from www.lorextechnology.com.

**NOTE:** Your computer must be on the same network as the camera to upgrade the firmware.

**To upgrade the camera firmware:**

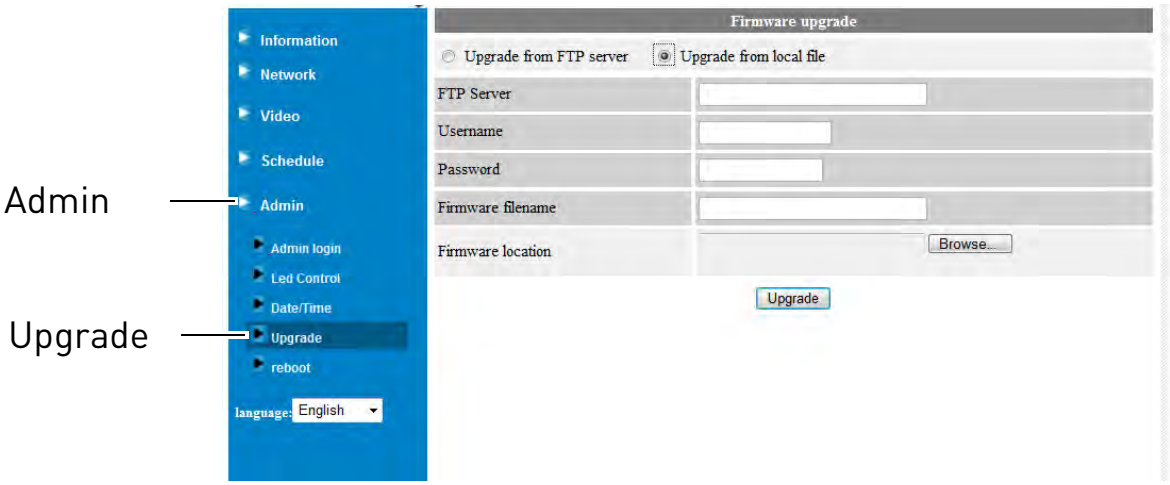
1. Download the free firmware upgrade from www.lorextechnology.com. Unzip the contents of the firmware .zip file to a folder.

2. In L-View, right-click on the camera in Auto Search and click **Web Configure**.

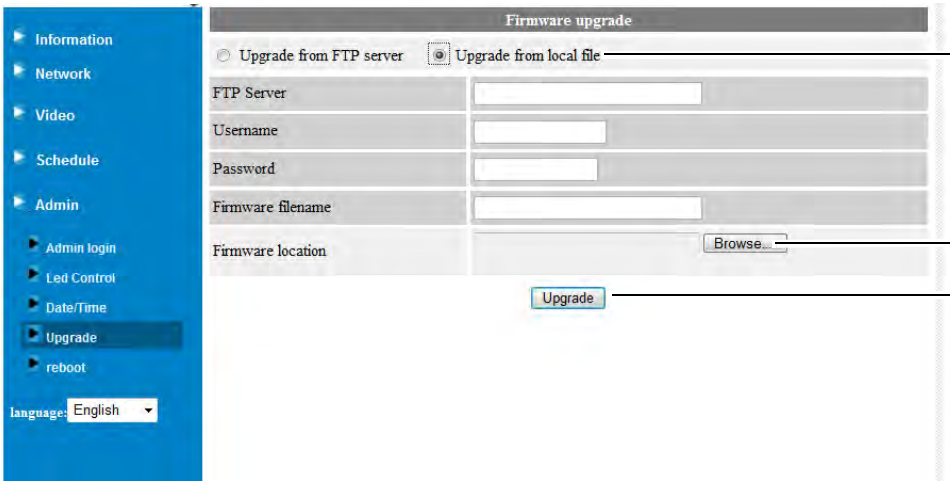



Right-click the camera under Auto Search and click Web Configure

3. Type the camera admin user name (default: **admin**) and password (default: **left blank**) and click **Ok** to log into the camera.
4. Click **Admin** then click **Upgrade**.




5. Select **Upgrade from local file**.
6. Click **Browse**, locate the firmware upgrade file, and then click **Open**.
7. Click **Upgrade**. Wait for the firmware upgrade to complete. **Do not disconnect the power or network cable during the firmware upgrade.** The camera will reboot once firmware upgrade is complete.




Select Upgrade from local file

Click Browse and select firmware file

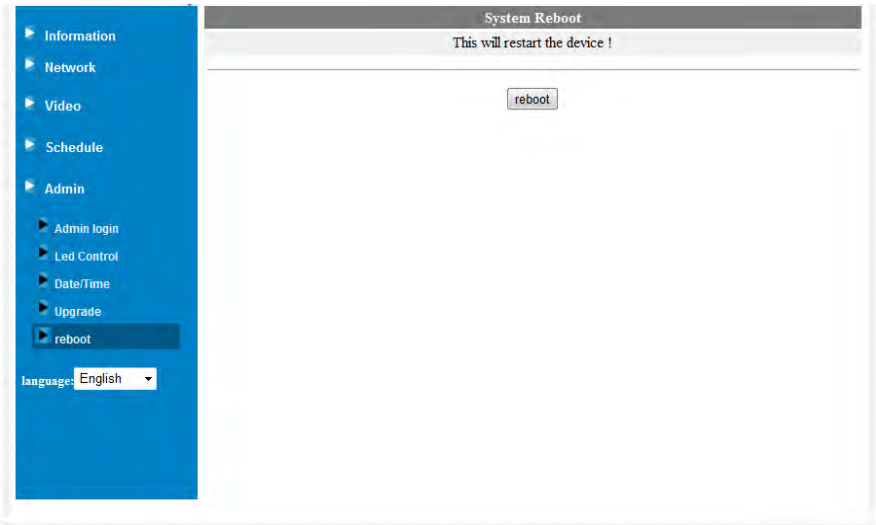
Click Upgrade

## *8.6.5 REBOOT*

Restart the camera from your Internet browser. This is useful if you need to restart the camera to apply settings changes or if the camera encounters an error.

**To restart the camera:**

1. Press the **reboot** button.



# 9. TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Mode:** | Day & Night |
| **Power:** | 5V (USB) - 12V, 1A |
| **Processors:** | RISC CPU, hardware video processing and compression. |
| **Network interface:** | Ethernet 10BaseT/100BaseTX, Auto-MDIX, RJ-45 |
| **Wireless interface:** | IEEE 802.11b / g / n |
| **Image sensor:** | HD up to 1280x800 resolution<br>1/4" Megapixel Color CMOS<br>Separate sensors for day and night with automatic gain, white balance, exposure and brightness control |
| **PIR sensor:** | Effective distance – 7 meters |
| **Light sensitivity:** | 0.2 Lux ( IR LED off )<br>0 Lux (with 9 meters IR LED on)<br>Automatically turn on the IR LED on low light environment. |
| **Infrared thermometer:** | Infrared Range: -40 ~ 115 °C, accuracy:+-0.5°C |
| **Lens:** | 4.2 mm, F2.4, viewing angle: 66°, fixed iris.<br>Day and night separate lens |
| **Buttons:** | One reset button, to factory default settings<br>One WPS button for automatic WiFi setup |
| **Indicators:** | One LED for Internet connection status indication<br>One LED for Ethernet connection indication<br>One LED for SD card recording indication |
| **Video compression:** | H.264, baseline profile level 3.1 |
| **Video streaming:** | Separate frame rate/resolution/bandwidth settings for PC and mobile. |
| **Resolution:** | 1280x800, 1024x768, VGA(640x480), QVGA(320x240) |
| **Bandwidth:** | 64Kbps ~ 3Mbps |
| **Frame rate:** | 1~30 fps |
| **Audio:** | Built-in 0.5W speaker for alarm and half-duplex two-way audio.<br>Speaker jack for external speaker |
| **Video management software:** | |
| | L-View software for viewing and recording up to 4 cameras (PC/Mac) |
| | Lorex Ping app for viewing cameras on mobile (iOS/ Android™) |
| **Security:** | Web management username/password protection<br>Video display ID/password protection<br>WiFi WEP and WPA/WPA2 security mode |
| **Installation, management and maintenance:** | |
| | Plug & play by ID/password.<br>Firmware upgrades via FTP<br>L-View SW upgrade Push Notification |
| **Users** | Up to 20 simultaneous users (depends on video settings and internet bandwidth) |
| **Alarm and event management:** | |
| | Events triggered by PIR and sound detection<br>Email/ftp alarm message<br>Temperature alarm for low/high room temperature<br>Push notification on supported mobile devices. |
| **Dimensions:** | 68 x 25 x 95mm/2.8 x 1.0 x 3.7" (W x D x H) |
| **Weight:** | 0.28kg/0.62lbs (including camera bracket) |
| **Approvals:** | EMC - CE, FCC Part 15 Subpart B Class B, IC Class B<br>Wireless RF - CE, FCC Part 15 Subpart C, RSS210<br>Power supply: CE, FCC, UL, EN 60950 |
| **Operating conditions** | 0-50 °C<br>Humidity 20 – 80% RH (non-condensing) |

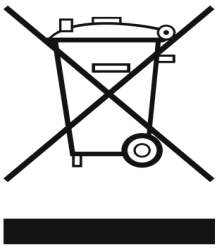
As our product is subject to continuous improvement, Lorex Technology & subsidiaries reserve the right to modify product design, specifications & prices without notice and without incurring any obligation.

# 10. CLEANING AND DISPOSAL

Clean camera with a slightly damp cloth or an anti-static cloth. Never use cleaning agents or abrasive solvents.

- Do not clean any part of the product with cleaners with thinners or other solvents and chemicals. This may cause permanent damage to the product which is not covered by the warranty. When necessary, clean it with a damp cloth.
- Keep your camera and monitor away from hot, humid, or wet areas or strong sunlight
- Every effort has been made to ensure high standards of reliability for your video monitor. However, if something does go wrong, please do not try to repair it yourself. Contact customer service for assistance.

## Disposal of the Device



At the end of the product lifecycle, you should not dispose of this product with normal household waste, but take the product to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, User's Guide, and/or box indicates this.

Some of the product materials can be re-used if you take them to a recycling point. By reusing some parts or raw materials from used products you make an important contribution to the protection of the environment.

Please contact your local authorities in case you need more information on the collection points in your area. Dispose of the battery pack in an environmentally-friendly manner according to your local regulations.

# 11. NOTICES

**Warning:** Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.



### FCC Notice

This device complies with Part 15, subpart C, of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

However, it is imperative that the user follows the guidelines in this manual to avoid improper usage which may result in damage to the unit, electrical shock and fire hazard injury. In order to improve the features, functions, and quality of this product, the specifications are subject to change without notice from time to time.

**Caution:** To maintain compliance with the FCC's RF exposure guidelines, place the camera at least 20cm (7.87in) from nearby persons.

### Industry Canada statement:

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Ce dispositif est conforme à la norme CNR-210 d'Industrie Canada applicable aux appareils radio exempts de licence. Son fonctionnement est sujet aux deux conditions suivantes: (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

### Radiation Exposure Statement:

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

### Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

# 12. WALL OR CEILING MOUNTING

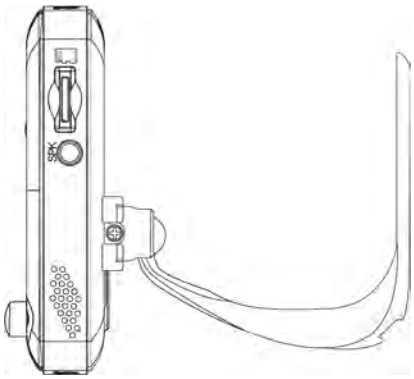
## 12.1 INSTALLATION TIPS AND WARNINGS

- **Camera is rated for indoor use only**. Do not install in wet or humid areas.
- **MAKE SURE** to run all power adapter and network cables at least **3ft / 1m** away from cribs, bassinets, play yards, and other safe sleep environments for infants.
- Do not point the camera out of a window. The camera will not be able to see at nighttime due to reflection from the Infrared LED.
- Temporarily connect the camera and test it before permanent installation.
- If using the camera with a wireless network, set up the camera's wireless connection before permanent installation.
- Make sure that power adapter cable and ethernet cable (if connecting the camera using ethernet) are long enough to reach the installation location.

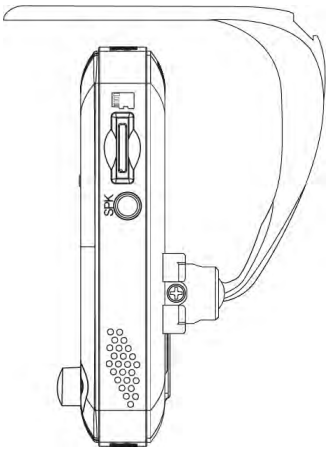
## 12.2 INSTALLATION

1. Use the camera mounting stand to mark holes for the mounting screws. If you are installing the camera in the ceiling, the screw holes should face the same direction that you would like the camera to point.
2. Drill holes for the mounting screws. If installing in drywall, it is recommended to use the included drywall anchors.

3. Attach the camera to the wall or ceiling using the included mounting screws. Adjust the camera angle as necessary. See below for suggested stand configurations.

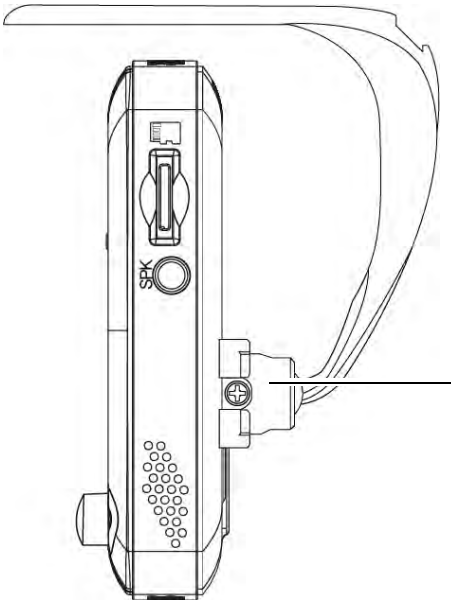


Wall Mount



Ceiling Mount

4. Secure the stand position by using a Philipshead screwdriver to tighten the screw connecting the camera to the stand.




5. Connect the power adapter cable and ethernet cable (if connecting the camera using ethernet) to the camera.

# 13. TROUBLESHOOTING

**WPS Wireless Setup does not work or router does not support WPS:**

- If using a smartphone or tablet, connect your device to your WiFi network and press the WiFi setup button in Lorex Ping. Follow the on-screen instructions to setup WiFi.
- If using a PC or Mac, connect the camera to the router using Ethernet and manually setup the camera to use WiFi. See "PC WiFi Setup" on page 31 or "Mac WiFi Setup" on page 39.

**WiFi is not working:**

- Camera has not been setup to use WiFi. If using a PC or Mac, WiFi setup must be completed while the camera is connected via Ethernet. See "PC WiFi Setup" on page 31 or "Mac WiFi Setup" on page 39.
- Incorrect password/network information entered. Re-complete WiFi setup and double-check your WiFi network settings.
- Camera is not in range of WiFi router. Move the camera closer to the WiFi router.
- Interference with other wireless devices is affecting signal strength. Move the camera and/or wireless router further away from any cordless telephones or other wireless devices.

**Password required to change settings different than password created:**

- Changing settings requires the admin user name and password for the camera. This is a different password than the one used to connect to the camera for video streaming. By default, the admin user name is **admin** and the password is **left blank**.

**Forgot password for camera:**

- Press and hold the Reset button under the camera for 4 or more seconds to reset the camera to factory default settings. The password will reset to the default password lorex.

**Camera does not appear in Auto Search or Local Search:**

- Camera may be on different network than computer. Press **+** next to camera list and enter the camera ID and password manually. If this does not work, check the network connection.

**Cannot access Web Configure on PC or Mac:**

- Camera may be on different network than computer. Connect the camera and computer to the same network (i.e. the same router), or use a mobile device to change settings over the Internet.

**Bright spot in video when viewing camera at night:**

- Night vision reflects when pointing a camera to a window. Move the camera to a different location.